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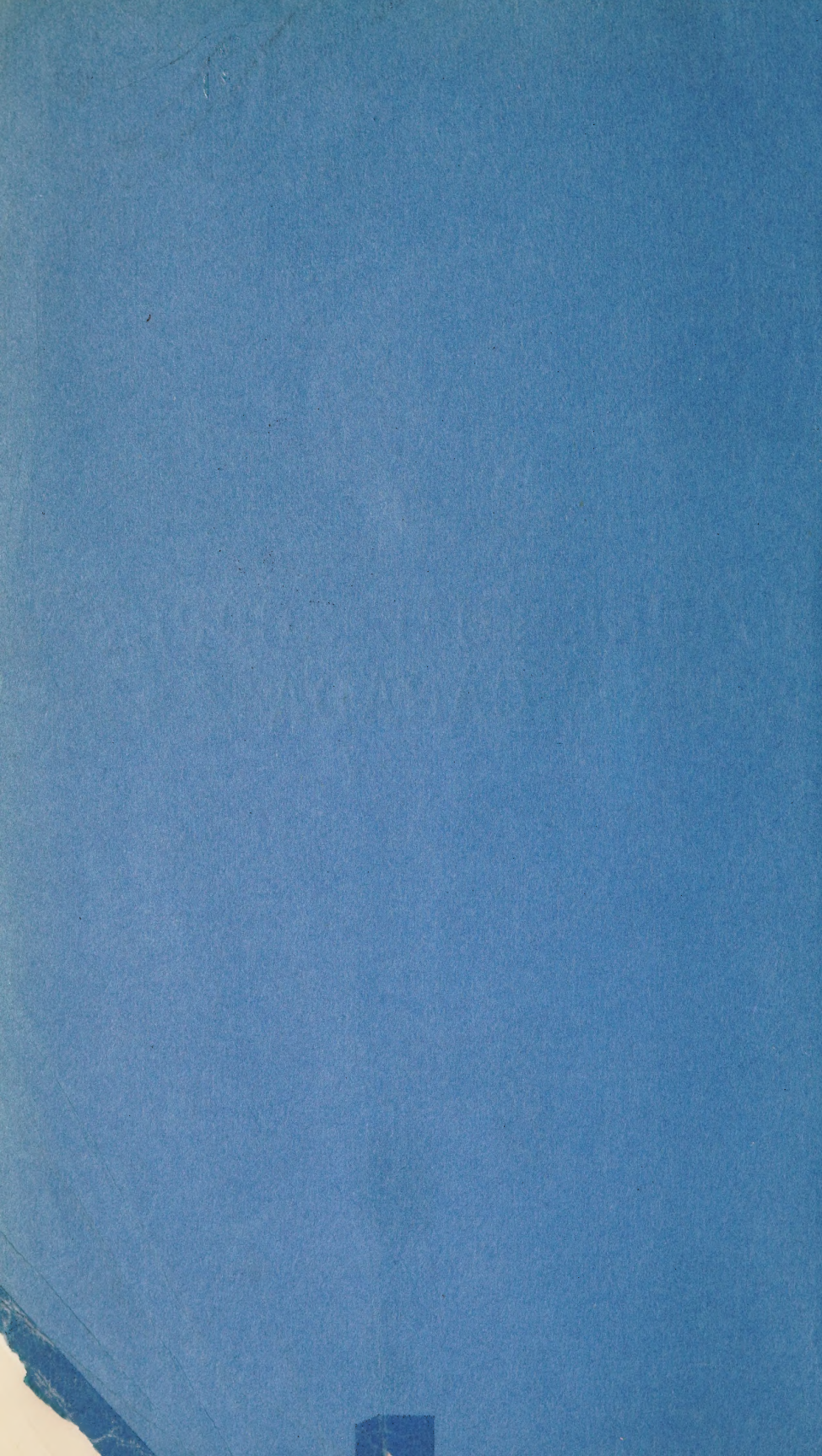
FUTURE FUEL SUPPLY
OF CANADA

BY A

SPECIAL COMMITTEE OF THE HOUSE OF COMMONS



OTTAWA
THOMAS MULVEY
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1921



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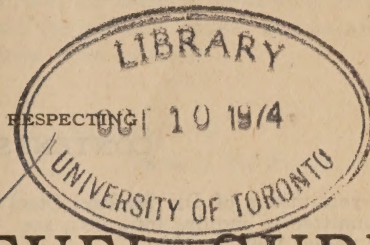
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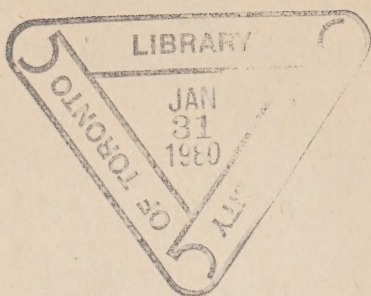


OTTAWA

THOMAS MULVEY

PRINTER TO THE KING'S MOST EXCELLENT MAJESTY

1921



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ORDER OF REFERENCE

HOUSE OF COMMONS,

FRIDAY, April 1, 1921.

Resolved:—That a Special Committee composed of Messrs. Steel, Blair, Cowan, Keefer, Hocken, Douglas (Cape Breton and Richmond), Ross, McKenzie, Lemieux and Maharg, be appointed to inquire into all matters pertaining to the future fuel supply of Canada, with power to send for persons, papers and records, to examine witnesses under oath and to report from time to time.

ATTEST,

W. B. NORTHRUP,

Clerk of the House of Commons.

HOUSE OF COMMONS,

WEDNESDAY, April 13, 1921.

Ordered:—That the evidence now being taken by the said Committee be printed from day to day and that rule 74 relating thereto, be suspended.

ATTEST,

W. B. NORTHRUP,

Clerk of the House of Commons.

HOUSE OF COMMONS,

FRIDAY, April 15, 1921.

Ordered:—That the name of Mr. Chisholm be substituted for that of Mr. Lemieux on said Committee.

ATTEST,

W. B. NORTHRUP,

Clerk of the House of Commons.

AUTHORIZATION FOR PRINTING

HOUSE OF COMMONS,

WEDNESDAY, June 1, 1921.

Ordered:—That the evidence taken from day to day during the current session by the Special Committee appointed to consider the Future Fuel Supply of Canada, be Indexed and issued in pamphlet form to the number of 1,000 copies (800 English and 200 French), and that rule 74, relating thereto, be suspended; and further, that the distribution of the said copies be and is assigned to the Clerk of the Committee, who is hereby instructed to cause them to be forwarded to educational institutions, public libraries, Boards of Trade, Boards of Commerce, and other such public bodies as may desire them.

ATTEST,

W. B. NORTHRUP,

Clerk of the House of Commons.

2ND AND FINAL REPORT

Mr. Steele, from the Special Committee on the future fuel supply of Canada, presented the following as their Second and Final Report:—

On March 23rd the House adopted the following resolution:—

That, in the opinion of this House, the future fuel supply of Canada should be considered by Parliament, and that a Special Committee of the House of Commons should be forthwith appointed to inquire into all matters pertaining thereto, with power to send for persons, papers and records, to examine witnesses under oath and to report from time to time.

Your Committee was appointed accordingly.

We have held 26 sessions and have examined 37 witnesses.

Among the subjects dealt with in our investigation are the following:—

The fuel resources of Canada according to Provinces;

The production of coal in Canada and the distribution thereof;

The importation and distribution of United States coal;

Transportation of coal by rail and by water throughout Canada;

Industrial and domestic fuel;

Coal substitutes, with special reference to water powers, electricity, peat, coke, gas, oil shales and the carbonization of lignites.

Representatives of the Government of Alberta, New Brunswick and Nova Scotia were heard by the Committee.

Witnesses have been heard also on behalf of the coal operators of Nova Scotia, Alberta and British Columbia.

Labour Unions of Nova Scotia sent four representatives who added materially to the evidence received by the Committee.

The Fuel Supply of Ontario was treated by the ex-Fuel Controller of the Province, representatives of the Retail Coal Dealers' Association and by a representative of one of the largest distributing agencies of the Province.

We have found that with the enormous reserves of coal in the Maritime Provinces, British Columbia and Alberta, these provinces do not suffer to any degree from scarcity of coal—Saskatchewan and Manitoba are gradually using more and more of the coal from the Alberta mines and are also developing by mining and briquetting their own enormous fuel resources. Owing to the absence of the necessary shipping from the St. Lawrence during the war, Quebec, which in 1915 obtained 2,048,222 tons from Nova Scotia, in 1920 purchased only 386,022 tons from that province, the balance of her supply having been obtained from the United States. Ontario, unfortunately, is at present almost entirely dependent on the United States for her coal supply and is in such a position that a prolonged strike in the United States mines or the development of such a situation as would prevent the export of coal from that country, would find that province cut off from its usual source of supply. In such an emergency, the present production of coal in Canada is entirely insufficient to supply the needs of the people of that province, even if the transportation of same were practicable.

The limited time at the disposal of the Committee has not permitted a thorough investigation in all its phases of the problem of Canada's future fuel supply, but we have secured sufficient evidence to warrant us, in our opinion, making the following recommendations to the House:—

1. The vital importance of the fuel supply of the people of any country admits of no argument, but to the people of Canada with its rigorous climate, fuel is one of the chief essentials of life. This being so, your Committee are of the opinion that, in view of the difficulties that our people have experienced during recent years in securing their necessary supply of coal, and in view of the possibility and even probability that the same adverse conditions may be repeated at intervals in the future, it is, in our opinion, most desirable that there should be an officer of the Government appointed for the purpose of keeping in close touch with the fuel situation of Canada. This officer, so far as federal authority may permit, should be clothed with sufficient powers to enable him to cope with any emergency that may arise, in order that our people may not be subjected to unnecessary suffering and inconvenience resulting from an insufficient supply of fuel for domestic or industrial purposes. He should have authority also to inquire into all phases of the fuel situation and to select such experts as he may deem necessary to carry on the work entrusted to him.

2. That our water powers should be developed to the greatest possible extent in order to supply hydro-electric energy to industrial plants.

3. The electrification of railways located in districts which cannot be economically served by Canadian coal might solve the fuel difficulty there and is worthy the attention of the railways affected.

4. That the transportation of coal by water is an important factor in the cost of coal to the consumer and that, therefore, everything possible tending to reduce the cost of transportation by water should be done.

5. That people should be encouraged to use domestic coal, coke, peat and briquettes when obtainable, instead of imported anthracite.

6. That all consumers, and particularly domestic consumers, should be urged to purchase their coal in the early summer when transportation facilities are at their best for the distribution of coal and that transportation companies be asked to assist in accomplishing this end by granting a substantial reduction in freight rates at such seasons.

7. That Canadian coal operators be urged to produce and store at suitable points in Quebec, Ontario and Manitoba, large quantities of coal, with a view to the production or manufacture of coke for domestic fuel and as a substitute for imported anthracite and also for the production of the by-products thereof.

8. That a campaign of publicity be maintained for the purpose of educating the people of Canada to the need of using Canadian coal wherever possible to do so, and to inform them of the best methods of using the various fuels for both domestic and industrial purposes, in order to obtain the greatest possible efficiency and increase the demand for our national products.

Certain questions have been partially dealt with by your Committee, which in our opinion require further investigation, and among these, we may enumerate:—

Grading and inspection of coal at the mines;

Storage in the large cities of coal which can be delivered at the season of the year when freight cargoes on our railways are the lightest;

The economic use of fuel both in our homes and in industrial plants with the object of securing the greatest possible efficiency.

The distribution of cars for the purpose of coal transportation.

Such matters can well be further investigated by the officer previously suggested.

The future fuel supply of Canada is a great national problem and as such requires national action for its solution.

Your Committee begs to submit herewith for the information of the House a copy of the Evidence taken by it.

And we further recommend that the Evidence taken from day to day during the current session by the Special Committee appointed to consider the future Fuel Supply of Canada, be indexed and issued in pamphlet form to the number of 1,000 copies, and that rule 74, relating thereto, be suspended; and further, that the distribution of the said copies be and is assigned to the Clerk of the Committee, who is hereby instructed to cause them to be forwarded to educational institutions, public libraries, Boards of Trade, Boards of Commerce, and such other public bodies as may desire them.

RECOMMENDATIONS OF THE COMMITTEE

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7. That Canadian coal operators be urged to produce and store at suitable points in Quebec, Ontario and Manitoba, large quantities of coal, with a view to the production or manufacture of coke for domestic fuel and as a substitute for imported anthracite and also for the production of the by-products thereof.

8. That a campaign of publicity be maintained for the purpose of educating the people of Canada to the need of using Canadian coal wherever possible to do so, and to inform them of the best methods of using the various fuels for both domestic and industrial purposes, in order to obtain the greatest possible efficiency and increase the demand for our national products.

Certain questions have been partially dealt with by your Committee, which in our opinion require further investigation, and among these, we may enumerate:—

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OFFICIAL REPORT OF EVIDENCE

TAKEN BY A

SPECIAL COMMITTEE OF THE HOUSE OF COMMONS APPOINTED
TO ENQUIRE INTO MATTERS PERTAINING TO THE
FUTURE FUEL SUPPLY OF CANADA

OFFICIAL REPORT OF EVIDENCE

HOUSE OF COMMONS,
COMMITTEE ROOM 425,
THURSDAY, April 7th, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: The Committee will come to order and we will begin our session this morning.

In opening our session, let me read a telegram which I received last evening:

Dr. Steele,
Chairman, Fuel Committee,
Ottawa.

Edmonton, Alta., April 6th.

I have wired on the 1st of April to the Right Hon. Arthur Meighen that the Government of Alberta desire to co-operate with your Committee. Will you please wire me when you will be ready to hear us concerning Alberta coal and its development?

(sgd) J. L. COTE.

This is in line with the policy which it was decided to follow the other day, to invite the co-operation of the provincial Governments in the work which we have to carry on.

Mr. COWAN: Have we had responses from the other provinces? I am very pleased indeed that the Government of Alberta has seen fit to communicate with us and express their willingness to co-operate, and I think we should wire a communication to each of the provinces, because it is necessary to know what policy they are following, as otherwise, we might adopt the policy which would be antagonistic to them and do more harm than good. If any of the other provinces are asleep, they should be wakened up. The province of Ontario must be interested in dealing with the fuel question. It is of vital importance to them, and they have had a committee for years. Nova Scotia ought to be vitally interested. I think they should be communicated with immediately.

The CHAIRMAN: It is our plan to send out communications to each of the provinces. That is in line with the desires of this Committee as expressed the other day.

Hon. Mr. LEMIEUX: Last fall I went west as far as Banff. The object of my trip was to acquaint myself with the coal districts there, especially in Alberta, and I went to Crow's Nest Pass, and stayed at Blairmore for a few days, which is quite a coal centre. I was accompanied by Mr. Senator Dandurand, and we met a gentleman there, who is the general manager and vice-president of the West Canada Collieries, and a mining engineer of wide experience. I think they are shipping every day something like two thousand tons of coal, and much to my surprise I found they were sending coal as far east as Sudbury. Of course, they are also selling coal to the United States, shipping it into the State of Washington and Oregon.

This gentleman is a mining engineer and expert on coal mines, and I believe that after a while, if you think it proper, we should call this gentleman. He represents some very large French and English interests as there is a good deal of French and English money invested there, and he is certainly the biggest producing operator in that district, so I would suggest that at a later stage of our proceedings, a man of his

experience should be called, because he can discuss these matters with us very intelligently. At a later stage of our proceedings, I think that Mr. Charbonnier, who is a mining engineer and expert of wide experience and great knowledge, will be willing to appear before us, and he would come without cost to the country, I can assure you.

The CHAIRMAN: Thank you for that suggestion, Mr. Lemieux. Now, this morning we were to have with us Mr. Cook from the Statistical Department, and Mr. McAllister and Mr. Hudson, the latter two of whom are here. Mr. Cook has not yet come in.

I think it might be well to start with the statement of the statistics, but in the absence of Mr. Cook, probably it would be better to call Mr. McAllister and proceed with his examination. I think we will be able to spend one hour to-day, until eleven o'clock, on account of the meeting of other Committees.

Mr. COWAN: Before we start, might I ask, in view of the fact that we will not be able this morning to finish with the gentlemen who are here, are they in a position to return at any time we may require them?

The CHAIRMAN: Yes, they can return at any time. I think it is unnecessary perhaps to swear this witness, in giving his evidence.

Mr. Ross: When we get to the question of costs, they should give evidence under oath.

Mr. COWAN: That is only one point. Supposing we say we will not swear this particular witness, and the next one comes along and we decide to swear him. How are you going to swear one and not the other?

Mr. Ross: Swear them all. That is the best way out of it.

Mr. COWAN: It would not do any harm. These gentlemen are going to tell us nothing but God's given truth, we know that, but you remove the objection which might be taken by swearing some and not others.

FRED G. McALLISTER, called, sworn and examined.

By the Chairman:

Q. Mr. McAllister, what official position have you held which will enable you to give this Committee valuable information?—A. Mr. Chairman, I was with Mr. C. A. Magrath originally, at the time he was the Fuel Controller, first in the capacity of statistician, and later, I was his personal representative in Pittsburgh, where the Fuel Controller had an office, and then, on returning to Canada, I took some of the administrative work as it grew heavier in connection with the Central Fuel Control Office here. Last summer, when the Chairman of the Railways Commission, with his colleagues, were made Fuel Controllers, I was asked by him to administer the Act under which they were called to handle the fuel situation last winter.

Q. Have you a formal statement prepared?—A. I have not.

Q. Are you prepared to make a formal statement?

By Mr. Ross:

Q. Did you have any experience in coal mining matters, or the handling of coal before taking up these various positions?—A. No, sir.

Q. What was your last occupation before that?—A. I have been following up statistical work more or less. I was in charge of the statistical survey that was made by the province of Ontario in connection with its Good Roads System, prior to laying down a plan for this present programme of completion, and I have done other

[Fred. G. McAllister.]

statistical work. Last winter I was in Winnipeg, and did the statistical work for the Wheat Board. It was more or less as a statistical expert that I was called in to this fuel work, although I happened to be a member of the Ontario Bar.

The CHAIRMAN: Mr. McAllister is prepared to make a statement which will open up the way for a discussion.

The WITNESS: I think, Mr. Chairman, as I am the first speaker it might possible best serve the purposes of the Committee if I were to endeavour seemingly to present a cross-section of the general situation, leaving it for the people who are more intimate with the various details than I am, to fill it in. I have divided what I have to say into three general headings, i.e., the general sources of supply, the system of distribution which we have and finally, some of the features connected with the consumption.

Of the sources of supply, we may take, first, our foreign, and secondly, our domestic, and of the foreign we come first to our anthracite, which as all know, is in the United States, and these sources are infinitesimally smaller than the bituminous, at the same time, officials of the United States Fuel Administration have estimated that the sources there are capable of producing about ninety million tons a year for some centuries to come; so it is not a question of supply, so far as anthracite is concerned.

The matter of costs, however, immediately comes to the foreground. In recent years, the costs, as all know, of labour and material have greatly increased. Aside from that, however, the time is now come when the United States anthracite mines have got down to smaller seams, a six or seven-foot seam, whereas in former days they were operating much larger seams, and the result is that with the same amount of labour they get a smaller return. In consequence of this, we cannot state that the general costs of our anthracite will come down to the basis that was previously in vogue prior to the war.

There is another factor in connection with the anthracite supply that may be of interest, and that is that seventy-two per cent of the production is in the hands of eight large companies which tend to form a more or less monopolistic condition. Recently the Public Ledger of Philadelphia has, in featuring an investigation made by W. Jett Locke, who is an economic Counsel in the United States, and whom our Government brought up here recently to address the Joint Convention between Labour and the Manufacturing Interests—

By Hon. Mr. Lemieux:

Q. What is his name?—A. W. Jett Locke. He made some rather startling charges which were subsequently refuted, and I would be glad to submit a photographic copy of the newspaper reference to that if the Committee desire it. It is not evidence, but it bears on it.

By the Chairman:

Q. Is it authoritative, or is it merely the opinion of the opinion of Mr. Locke?—A. It is the opinion of Mr. Locke based on his findings. I was just mentioning it in passing. If the Committee asks for it, I can give them a copy.

By Mr. Ross:

Q. What was the result of that discussion? You say Mr. Locke made some startling statements which were afterwards refuted. What was the truth?—A. I have not followed it up. It was quite recently. Mr. Locke's statement was that the consumers of Philadelphia were paying over \$3 more for coal than they really needed to pay, taking into consideration the cost of operation.

Q. Was Mr. Locke the man employed by the Canadian Government in connection with the supply of coal during the war?—A. No.

[Fred. G. McAllister.]

Turning to the bituminous field. The supplies in the United States are, as all know, practically unlimited. As a matter of fact, the tendency in the United States is towards over-production. There are large mining interests there, whose mine capacity is seldom fully invoked. That is to say, the mines operate to only a relatively small percentage of their full total capacity.

In the second place, there are scores of smaller mines which are attracted into the market the moment the price comes up above normal, the result being that in a comparatively short time large tonnages are thrown on the market, thus demoralizing the trade.

Prior to the war, Canada had a great deal of difficulty in getting bituminous supplies, so that the question is not so much, as far as the United States source is concerned, one of production; it is more one of transportation, as I wish to show in a moment.

Another thing affecting the cost of bituminous coal in the United States is the fact that there is a very large movement of both grain and ore from the Northwest to points on Lake Erie, enabling the transportation companies to give a low rate on coal movements westwards, and in this way the outlet for the mines is increased for their coal so that they have been able to spread their overhead over the whole year, and consequently reduced their general cost to the public.

Then, turning to our domestic sources of supply, and moving from west towards the east, we need not take into consideration British Columbia—there is really no fuel for distribution there on account of the extremely mild climatic conditions, and on account of the fact that they have mines closely adjacent to other sources of supply. As a matter of fact this province exports close to a million tons of coal every year.

Unfortunately, owing to the mountains intervening this supply is not available for other parts of Canada.

In Alberta, it has been estimated that this province has about fifteen per cent of the entire world's supply. The whole province might well be said to be underlain with coal, of various qualities, it is true.

The great difficulty there again is not one of production, but largely one of costs.

A computation made a little while ago went to show that the fuel output of the mines in Alberta is around twenty thousand tons—

By Mr. Cowan:

Q. Twenty thousand tons per year?—A. Per year, and that necessarily means that their overhead costs makes the cost to the consumer more.

Q. Do I understand they cannot increase that in these mines; that that is their limit?—A. The difficulty is not that, the difficulty is that there are too many small mines. The production is large enough; the production during the last calendar year, just closed, is over six million tons, but there are apparently too many mines in the business.

By the Chairman:

Q. You mean the average production of all the mines producing?—A. Yes.

By Mr. Cowan:

Q. In other words, there are so many small mines, each of which has an overhead, so that the overhead makes the expense of production of coal very great?—A. That is right.

By Mr. Hocken:

Q. They are not selling enough coal from these mines to enable them to produce cheaply?—A. Yes. I should mention another factor in regard to that, and that is the intermittent demand. It falls off greatly in the summer time, so that a great many of these mines are closed up entirely for a long period each year.

[Fred. G. McAllister.]

By Mr. Cowan:

Q. Just at that point: Do you know anything about the quality of this coal, as to whether the coal is of sufficient quality to keep during the summer, if the people will buy it?—A. Some of it is—almost all of it is. If, for instance, the farmers would take the trouble to put it in the pits.

Q. That is what I want to get after. My view of it is that it will keep. I have never had any trouble. For instance, I buy Galt coal, which is bituminous. In the spring I will have a certain amount left over; I do not use all I put in. It is absolutely good in the fall if it is kept under cover, but people have the idea that it will not keep, and that is a wrong idea, and the sooner they get that out of their heads the better.

The WITNESS: One of the great difficulties throughout the country is the unwillingness of the public to meet the operators half way. They want the coal at their own convenience, and they are very particular about the quality, and naturally they are asked to pay for their tastes.

By Hon. Mr. Lemieux:

Q. They have some anthracite?—A. They have a pocket of anthracite at Banff.

By Mr. Cowan:

Q. Have you had anything to do with these mines at Sheep Creek, which is on the border between Alberta and British Columbia, which I think is owned by Pat Burns?—A. No.

By Hon. Mr. Lemieux:

Q. There are three brands in Alberta, bituminous, a little anthracite, and lignite?—A. In Alberta the common name out there is domestic, so the three brands are anthracite, bituminous and domestic.

By Mr. Ross:

Q. In the year 1919—in two years, 1919 and 1920—Alberta increased her output by fifty per cent; in 1920 over 1919. What about the increase or decrease in cost?—A. No figures on cost have been kept recently to my knowledge—

Q. That is very important.—A. —by any branch with which I am concerned. However, a man who can give you some information on that would be Mr. John Sterling.

By Mr. Cowan:

Q. Where is he?—A. An official of the Labour Department, who lives right in Alberta. The Labour Department exercises control of the output in what they call district 18, which includes all of Alberta and a part of British Columbia.

By Hon. Mr. Lemieux:

Q. Is it not a fact that the cost has increased materially?—A. Yes.

Q. Because of the labour troubles?—A. Well, the cost of labour has increased.

By the Chairman:

Q. May I interject a remark there? I think perhaps it might be as well to permit Mr. McAllister to follow on the lines with which he is familiar. He has a general knowledge of the matter, and I suggest that we permit him to follow along the lines upon which he can speak with authority. Then we can go into the details with other witnesses.

The WITNESS: My object was to give an outline sketch of the whole situation from the viewpoint of a fuel control official.

[Fred. G. McAllister.]

By Hon. Mr. Lemieux:

Q. You were saying that Alberta could supply fifteen per cent of the world's consumption of coal?—A. I said that Alberta had in the earth fifteen per cent of the entire world's supply.

By Mr. Keefer:

Q. You were speaking of lignite?—A. Yes.

Q. All classes of coal?—A. Yes.

By Mr. Ross:

Q. What about Saskatchewan?—A. Saskatchewan has a small pocket of coal; their output this last year is around three hundred thousand tons.

Mr. COWAN: I would suggest that that be left until we call the chairman of the Lignite Utilization Board. He can give us better information on that than anybody else.

The WITNESS: Saskatchewan has a very low grade coal.

By Mr. Keefer:

Q. Tell us what you know of the Saskatchewan coal?—A. I was passing over Saskatchewan because I am merely trying to deal with a few particular general features, of the situation and Saskatchewan is not a factor as yet in the general fuel supply problem of the country.

In the Maritime Provinces, there is, as everybody knows, large supplies of a very good grade of coal. Here again, the factor of cost comes into play; a large proportion of the supplies there are in submarine areas and must be approached from one side, entailing increased costs. Then the fact that as you go further underground your haulage increases, is another item, and in these mines too, there is frequently met a gas which has blocked the utilization of electrically driven machinery, thus holding back what might otherwise be satisfactory produce in reducing the cost.

By the Chairman:

Q. Concerning your remarks in that regard: Is that applicable to all the mines in the Maritime Provinces, or only to the larger mines?—A. To a large proportion of them, not all of them.

Then one feature about the market in the Maritime Provinces has been that the demand for industrial coal—that is, coal for industrial purposes—, is not very heavy, and as in the West, so in the Maritime Provinces, the demand has been seasonal, that is, confined somewhat to the summer months. Of course, they have on the other hand bunkering as an outlet, and, when conditions are favourable, an export market overseas.

The market in the United States, owing to the low cost of production, is one in which they have a great deal of difficulty on account of keen competition, although if you take the Maritime Province mines and put a compass in the centre of them, you could draw a circle of eight hundred miles and you would strike no other mines, other than those in New Brunswick, and none in the United States.

One thing that might possibly serve to stabilize the industry there would be the securing from the railroad of long term contracts at reasonable prices which would enable the mines to have a more ready output for their coal.

By Mr. Cowan:

Q. Do you know whether the railways have ever tried to make any such long term contracts?

[Fred. G. McAllister.]

Mr. KEEFER: I think, Doctor, it would be a good idea to let the witness go on, and we can make our own notes and ask him these questions afterwards. He is simply giving a resume, and it is pretty hard to interrupt him.

The WITNESS: Turning now from the question of sources of supply to the question of distribution and dealing first with the United States: We find that the coal movement to Canada from the United States is moving over an area of great transportation congestion. During the war a series of expedients were resorted to to overcome this, such as zoning, by which industries were required to take their coal from the nearest area, and priority order to the railroads, and other expedients which were merely of a temporary character.

One thing that was worked out was very good, and that was the ore and coal exchange of Cleveland, by which coal was pooled and then distributed, so that when vessels came up they could get quick loadings and get away.

Then coming to Canada, and again going from West to East, in the matter of distribution, one of the great difficulties of the prairies has been that the public demand has not been held up during the summer months, but immediately on the close of summer the transportation equipment has been required for the movement of crops.

By the Chairman:

Q. When you say "The demand has not been held up," you mean it has not been sustained?—A. Sustained, yes.

, Railroad facilities and others out there on the prairies—in the Prairie Provinces—have been very solicitous and have endeavoured to awaken the public to the necessity of getting their coal in during the summer, or else running the risk of being without coal when the winter comes on. Of course, if the coal is not moving before the crops, climatic conditions which prevail subsequent to the crop movement are such as not only to retard the movement, but ultimately the consumer is, in a great many cases, endangering his supply. That feature is a constant source of worry.

Another factor has been the difficulty of building up adequate stocks of coal so far as the railroads are concerned.

In this connection, it might be possible for the West to take a page from the notebook of the anthracite operators here in the East. About this time of year, the old line companies are in the habit of reducing the cost by fifty cents, and then adding ten cents on each month subsequently, and possibly in the West some such plan might be worked out through the co-operation of all the operators and to also facilitate such movements. It might be possible for the railroads to arrange to reduce the rates during the summer which would run parallel with the reduced cost given by the operators. That is simply a suggestion which occurred from observation of what is being done in the anthracite trade.

Coming to the head of the lakes: We find apparently that there is a change going on in conditions there. The province of Alberta has been very aggressively cultivating the market in Manitoba and throughout the eastern part of the West. They have a representative, an engineer, resident in Winnipeg, whose business it is to assist industrial concerns in the proper selection of fuel, and who is at call free of charge of any industrial consumer who is having difficulty with the coal they happen to be burning, and owing to this and the general pressure brought to bear by the western miners, there is some displacement going on in coal at the head of the lakes.

By Mr. Keefer:

Q. Explain what you mean by "displacement." You mean it is not going up to the head of the lakes?—A. No.

Q. What do you mean?—A. There is not as much anthracite. Last year, the imports at the head of the lakes were 503,000 tons, and this year 299,000 tons, almost cut in half.

[Fred. G. McAllister.]

By Hon. Mr. Lemieux:

Q. Anthracite going to the West?

Mr. COWAN: From the East.

By Hon. Mr. Lemieux:

Q. It has been cut in two?—A. Not quite, but nearly.

By Mr. Ross:

Q. You mean that American anthracite is being displaced by Canadian bituminous in the West?—A. That seems to be the tendency.

Q. You mean in Western Ontario, too?—A. There have been a few carloads but nothing to amount to anything.

By Mr. Douglas:

Q. That applies especially to Manitoba?—A. Yes.

By the Chairman:

Q. This engineer in Winnipeg: Is he in the employ of the Government or of the mine operators?—A. I cannot exactly say who pays his salary.

By Mr. Cowan:

Q. I think you will find it is the Alberta Government. I am sure of that. They have a man there demonstrating the use of the Alberta coal—

The CHAIRMAN: It is a good policy.

By Mr. Douglas:

Q. Is that the Coal Sales Agency?—A. No, that is acting for the operators.

Q. This concern does not exactly operate it?—A. No, it is just an official there who gives scientific advice.

Q. Referring only to the Governments of the West?—A. Yes.

By Mr. Ross:

Q. It might be a good thing to have him before us?—A. Yes.

Mr. COWAN: That was decided this morning. I thought it was decided that at the proper time we will have a representative of the Alberta Government here.

The WITNESS: Now, I might say in connection with this replacement of American coal by Canadian coal that concerns handling United States coal have built up extensive storage facilities at the head of the Lakes, and have large financial investments there, and they feed the coal to Winnipeg and the Manitoba market as Winnipeg and Manitoba want it. There are practically no storage facilities either in Winnipeg or just west of Winnipeg that could perform a similar service for Western coal, and that operates in favour of the United States coal, from the consumers' standpoint. They can get it as they want it, whereas if they take the Western coal they have to take it when the operators can give it to them under present transportation conditions.

By Mr. Douglas:

Q. And this, apart from the question whether one coal is better than the other?—A. Apart from that, yes.

Q. I suppose the Alberta coal will score as well as the others?—A. It is claimed some of it will, but admittedly a large part of it will not.

Now, coming to the central consuming area of Canada, Ontario and Quebec, and dealing with distribution the railroads have practically been able, without exception, to handle the situation. During exceptionally cold winters the Niagara gateway blocks up, that is to say, the Canadian railroads are not able to take the coal away from the Niagara gateway and a blockade ensues. This last year was

[Fred. G. McAllister.]

an exception; no blockade developed there, and as a matter of fact, open top equipment came through that gateway in sufficient numbers to carry over eight million two hundred thousand tons of coal. All these open tops were not loaded with coal, but it is a rough index of the movement through that gateway, because you can balance against the open tops box cars loaded with coal.

Another feature has been the very favourable movement of ferry coal.

By Mr. Cowan:

Q. What?—A. Coal moving into Ontario by ferry.

By Mr. Keefer:

Q. Across Lake Erie?—A. Yes, across Lake Erie. By way of illustration, this year at Sarnia and Windsor, 160,000 tons came in by ferry as against 82,000 last winter; at Erie there was a falling off; 286,000 tons as against 362,000 last year; at Port Stanley, and Port Burwell there was a movement of 540,000 tons this year as against 416,000 last year, and at Port Maitland, 246,000 tons this year as against 152,000 last year; at Coburg, 434,000 this year as against 356,000 last year, showing that the ferries are capable of contributing largely to the movement of coal.

By Mr. Keefer:

Q. Do you happen to know the difference in the cost of transportation across the water instead of the Niagara frontier?—A. I cannot tell you about the ferry coal, but I could tell you about the all rail to Toronto and the water to Toronto.

Q. What is the difference?—A. The water rate is 95 cents.

By Mr. Douglas:

Q. From where?—A. From Erie ports to Toronto.

By Mr. Keefer:

Q. What is the rail rate?—A. \$3.32.

By Mr. Ross:

Q. Mr. McAllister, on the basis of what you suggest there,—a large increase in ferry coal—it should have been cheaper as far as transportation is concerned.—A. The large bulk of this ferry coal is bituminous coal and the greater proportion of it is for railroad use.

By Mr. Cowan:

Q. Where do they get the bituminous coal from—what state?—A. All from Pennsylvania.

Q. Do you know anything about the freight rates from that point in Pennsylvania to the Canadian Ports, that is, including rail?—A. Well, the freight rate, of course, depends on where the mines are located, but a representative rate would be \$1.95.

By Mr. Douglas:

Q. What field is that from?

By Mr. Cowan:

Q. You said "all rail and water?" Does that mean by rail from the point down in Pennsylvania to the water front on the American side, and then by boat across? Do you know what the rate is that way?—A. The rate from around Pittsburgh to Lake Erie is \$1.95.

By Mr. Douglas:

Q. Is that from the Clearfield field?—A. Near Pittsburgh.

Q. Is that the cheapest rate?—A. I am not able to state that.

[Fred. G. McAllister.]

Q. You cannot give the average rate?—A. No, I merely selected a representative rate.

The CHAIRMAN: We will have a witness at a later date who will be able to give us actual figures on the rates.

By Mr. Keefer:

Q. Just to straighten up that \$3.90. Is the \$1.95 included in the \$3.90?—A. \$3.32

Q. Is the \$1.95 in the \$3.32?—A. Yes

Q. So that the proper comparison with the \$3.32 would be \$1.95 and 90 cents, or \$2.85, as against \$3.32, is that right?—A. Yes.

One other point with regard to the water-borne coal before we leave it, and which will naturally arise from what has been mentioned, is that it would appear that some of the cities that are lake ports should be able to handle more water-borne coal than they do, Toronto, Hamilton, and possibly Ottawa. That would entail, of course, the utilization of unloading and storing facilities.

By Mr. Hocken:

Q. If you add the cost of storing this, that is, taking the capital cost of the work necessary for storing, and add to the cost of water-bearing—how would that compare with the total cost of bringing it all the way by rail?—A. Well, take the case of Montreal, for example. I cannot give you exact figures on that, but I am giving you as an example, Montreal. They do handle large tonnages down the river, which is subsequently distributed.

The Montreal market provides the way to absorb over 2,600,000 tons annually from the Maritime Provinces. Last year, there was only in the neighbourhood of some 256,000 tons, something like that. In other words, the Montreal market has been "shot to pieces" as they say, so far as the Maritime Provinces coal goes.

By Mr. Cowan:

Q. They have not been using as much as they formerly did?

Mr. KEEFER: No, they could not get the boats.

By Mr. Douglas:

Q. When you say "last year" what do you mean?—A. In the year ending a few days ago, the 31st of March.

Q. The last coal year?—A. Yes. Of course, it is practically the same thing because the season of navigation falls within the year. It is limited to the time the St. Lawrence is open, when referring only to water-borne coal.

By Mr. Cowan:

Q. Are you sure that the lessened use of Nova Scotia coal by Montreal is due to the fact that they cannot get the boats?—A. Recently, I would say that prior to the war, had the cost of Maritime coal been lower they should have had more than they did; in other words, there was a large tonnage of Maritime coal sold in the market prior to the war.

Q. Just at that point: You referred to the action of the Alberta Government which had popularized the western coal. Has the Maritime Provinces done anything of that kind, or would it be of any advantage if they did, would it have the same effect in Quebec, for instance, as it has had in Manitoba?—A. I do not know about the quality. The quality is very good, so they would not need to talk quality very much, but I was referring to the question of price. The mines of the Maritime Provinces cannot produce coal as cheaply as the United States.

Q. How does their coal compare in quality?—A. It is very good, in the majority of cases.

[Fred. G. McAllister.]

By Hon. Mr. Lemieux:

Q. You mean good, as compared with the bituminous in the United States?—A. Yes, it compares reasonably well. The manufacturing concerns, I would say, would not turn down the Canadian product at all on the point of quality. Now, with regard to anthracite in the Montreal market. The trade is largely in the hands of a very few concerns and they are able to go down to the United States and talk in large figures to the producer, and consequently the Province of Quebec has never had a very serious time in regard to it, from an anthracite standpoint, because of the leverage which the Montreal people are able to place on the Pennsylvania people, and that compares very radically with the Ontario situation, where the coal is handled through a multitude of small dealers, all of whom make trips to the mines, and call on a number of people, but are not able to bring the same pressure to bear.

By Hon. Mr. Lemieux:

Q. What are the figures in Montreal with regard to anthracite? You gave two million—A. Montreal imported 1,230,000 tons this year.

By Mr. Ross:

Q. Of anthracite?—A. Yes.

Q. What were the Ontario imports?—A. 3,130,000.

By Mr. Cowan:

Q. Can you tell me this? Do these big concerns in Montreal, who are able to make such favourable terms sell their coal any cheaper in the province of Quebec, than the smaller concerns in Ontario sell to their patrons?—A. They do not sell it any dearer.

By Mr. Ross:

Q. Is it any cheaper?—A. I think it is about the same, but the consumer is largely assured of his supply.

Now, turning to the question of consumption. This may be dealt with briefly under three general headings, domestic consumption, industrial consumption, and railway consumption.

Under the first heading, it is undoubtedly true that domestic consumption could take care of more bituminous coal than they have in the past. That has been demonstrated in the Maritime Provinces where, before the war, the water rate to New York was \$1.25. It rose during the war to \$7, practically shutting out a great number of people in the Maritime Provinces, and they learned to buy proper sizes of bituminous coal, and there seems no reason why the people in the Maritime Provinces and Quebec could not buy bituminous for use in milder weather. Of course, there is the anthracite for use in cold weather, but the bituminous could be used in the milder weather of the springs and falls. It is a question whether the manufacturers could not design feeding equipment which would burn both classes of coal.

Turning to the industrial consumption. Here again, the railways burn great quantities of United States coal. As a matter of fact, the total quantity of United States coal burned by the railway companies last year was 5,166,000 tons.

By Mr. Hocken:

Q. How much domestic coal?—A. West of the Great Lakes they burn 6,500,000 tons.

By Mr. Ross:

Q. The railroads?—A. Yes.

[Fred. G. McAllister.]

By Mr. Keefer:

Q. The Canadian railways?—A. Yes.

Mr. COWAN: Mr. Chairman, as we are so near the end of the hour—and I am sorry for it—I would like to ask a question at this point, which I formerly asked.

Q. Have these railways tried to make any long-term agreements with the coal miners in Nova Scotia, or elsewhere, or have the Nova Scotia miners in order to press business tried to make any long-term contracts with the railways?—A. My impression is that they have not been getting as good as they might.

By the Chairman:

Q. You have no knowledge of the facts, Mr. McAllister?—A. No.

Q. Because, after all, facts are the only things which interest this Committee?—A. Yes.

By Mr. Cowan:

Q. Your opinion is that a long-term contract would be of distinct advantage if they could be induced to make it?—A. Yes, certainly.

Q. And that would give regular movements, and enable them to produce the coal much cheaper?—A. Yes.

Q. If they could do that, it would mean they could reduce the cost to the consumer, which would mean that consumers in Canada would be more willing to buy it? Is that not logical?—A. Yes, it is, but I do not know how it will work out; whether it will be perfect in practice or not.

There is one other point I would like to deal with, before closing, and that is the question of price. The consumption of coal is elastic; there are large quantities and it responds rapidly to changes in prices. This fact is sometimes lost sight of; that, although prices may vary up and down radically on the surface, there is a very large tonnage of coal always moving on the long-term low basis of cost. That is true with reference to the large industrial concerns and the large importers, for instance, so that the large bulk of the coal is not affected by these price movings, and it is only a small margin which reflects these price fluctuations, so that the price question is one that deals with a small percentage of the coal rather than with all the coal.

By Mr. Ross:

Q. It deals with the domestic supply, very universally?—A. That is the anthracite question. I was speaking of bituminous.

By Mr. Douglas:

Q. If I understand what you mean, Mr. McAllister, it is that the railways have coal producing companies and sell to themselves very cheaply?—A. I merely referred to this—no—for example, our railways go into the States and make terms with large companies down there, and our larger industrial concerns go down and make contracts over long periods of years, and some of our larger importers do the same thing, so that when the price fluctuations are going up and down from day to day, and from week to week, it does not affect these contracts at all, and a large bulk of coal is coming into this country at a price greatly below the prices quoted for spot coal.

By Mr. Douglas:

Q. That is not so lately?—A. There are still contracts.

Q. Do you know if there are any contracts outstanding between the Canadian National Railway for a long period of time and the American operators?—A. The Canadian National Railway has not been very far-sighted in their fuel policy.

I think, Mr. Chairman, that is all I have had in mind.

[Fred. G. McAllister.]

Hon. Mr. LEMIEUX: I am informed that the Canadian National Railway buy from Canadian mines.

The CHAIRMAN: It is after eleven o'clock, and I know that a number of the members of this committee are anxious to attend other committees. Shall we adjourn or do you wish to continue?

Mr. KEEFER: We ought to try to finish this witness.

The CHAIRMAN: I must go, and I think there are other members of the committee who wish to attend other committees this morning. I think Mr. McAllister is through with his statement.

The WITNESS: Yes, Mr. Chairman.

Mr. DOUGLAS: Perhaps Mr. McAllister will come back, because undoubtedly there are a number of things which have occurred to the committee about which they would like to question him.

Hon. Mr. LEMIEUX: He can come back at the next meeting?

The CHAIRMAN: Whenever we wish him to.

Mr. COWAN: When do we meet again? Next Tuesday at 10 o'clock?

The CHAIRMAN: Is 10 o'clock too early?

SEVERAL MEMBERS: No, that is all right.

Mr. DOUGLAS: I would like to suggest that we call at the next session a Fuel Department representative of the Canadian National Railways from Toronto.

The CHAIRMAN: I was going to say that we had two witnesses here to-day, Mr. Cook from the Statistical Branch, and Mr. Hudson from the Costs Branch. Would it not be well to continue with them at our next sitting? We thought it advisable to have them as early witnesses.

Mr. DOUGLAS: The only reason I am advocating that at the present time is this: That it is more or less a question of emergency. The miners in Nova Scotia are working at the present time about one day a week, and there is a question of a contract of about 600,000 tons offered to the company down there by the railways, and there is a dispute seemingly about this contract having been offered, and I think the situation can be largely cleaned up shortly. It is an emergency; it is in regard to getting the miners employed, and I think it is an emergency that can be taken care of by this committee, by hearing this man promptly. I would be sorry to dislocate the arrangements which the committee may have made, and I simply bring this up as a question of emergency.

The CHAIRMAN: I would suggest that Mr. Douglas meet with Mr. Keefer and myself to see if we can arrange the next day's programme accordingly. Mr. Keefer and myself have been placed in charge of the arranging of the programme.

Mr. COWAN: Is there any possibility of getting copies of this evidence in order that we may have it before us for reference?

The CHAIRMAN: Yes, we are having it printed from day to day.

The committee adjourned until Tuesday, April 12, 1921, at 10 o'clock a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

WEDNESDAY, April 13, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: It has been moved by Mr. Cowan, seconded by Mr. Maharg that a report be made to the House recommending that the evidence being taken by the Special Committee to inquire into matters relating to the future fuel supply of Canada be printed from day to day, and that Rule 74 relating thereto be suspended.

Motion agreed to.

The CHAIRMAN: Now, let me just outline what the committee on programme has done since the last session.

As the committee decided a letter was sent to the Premiers of each province in the following terms:

"There has been appointed a Special Committee of the House of Commons to inquire into all matters pertaining to the future fuel supply of Canada.

"I am directed by the committee to advise you thereof, so that if your Government deems it in the interest of your province to make any representations on matters covered by the inquiry, the committee will be pleased to arrange a convenient date on which any representative whom you may select to appear before them, may be heard."

That was sent to the Premiers of each province.

I might say that just immediately after that letter had been sent to the Premier of Nova Scotia we received the following telegram from the Minister of Public Works and Mines of Nova Scotia:

"We are much interested subject matter your special committee re future fuel supply. Have you any suggestions to make by which our co-operation or assistance can be used to advantage? Please advise and we will be at your service.

(Signed) E. H. ARMSTRONG,

Minister of Public Works and Mines."

I replied in the following terms:

"Hon. E. H. Armstrong,
Minister of Mines,
Halifax.

"Replying your telegram: Committee will be glad to hear representatives your Government on any phases of fuel question you desire to present, especially anything which will assist in increasing production of and extending market for Nova Scotia coal. Wrote Premier Murray to-day."

I may say that the only reply we have had from the Premiers of the provinces has been from Premier Taschereau of Quebec. In his reply he intimates that "As this matter comes under our Department of Lands and Forests, I am referring the matter to my colleague, the Hon. Mr. Mercier."

We have also had a letter from the Canadian Manufacturers' Association saying that they will be glad to co-operate with our committee for the purpose of solving this matter, which is of great importance to the manufacturing interests of Canada.

Is there any necessity of putting that in evidence?

Mr. COWAN: I think so. Why not?

Mr. MAHARG: It might be well to have it known.

The CHAIRMAN: Very well. This letter says:

"Dear Dr. Steele.

"We are advised that a special committee of the House of Commons has been appointed to inquire into all matters in regard to the future fuel supply of Canada, with the necessary power to examine witnesses, send for papers, records, and so forth.

"The Canadian Manufacturers' Association have had a committee at work for some considerable time making a study of this problem, and this is simply to say that we will be glad to co-operate with your committee as far as possible, in solving this matter which is of great importance to the manufacturing interests of Canada.

Yours faithfully,

(Signed) J. E. WALSH,

General Manager."

Now, in accordance with the desires of the committee we asked to have a representative of the Canadian National Railways here yesterday, but he was unable to be here, and will be here to-morrow.

Mr. COWAN: That is good; very satisfactory.

The CHAIRMAN: The vice-president will be here. On Tuesday next we will have a representative from the Alberta Government—

Mr. COWAN: I understand there are two of them coming.

The CHAIRMAN: Yes, the Hon. Mr. Côté and Professor Pitcher. I might say that I also wired Mr. Dick, sales agent of the Dominion Coal Company at Montreal, asking him to appear to-morrow. He wired back saying it would be more convenient for him to appear at the beginning of next week, if that is convenient to the committee.

Mr. COWAN: I suppose to-morrow will be pretty well taken up with the Canadian National.

The CHAIRMAN: Yes, probably. Possibly, if we could arrange what days next week you will meet so we could communicate with Mr. Dick further in the matter. The Alberta people will be here on Tuesday. We cannot very well meet on Monday.

Mr. COWAN: Will the Alberta people be here on the Tuesday morning train?

The CHAIRMAN: I suppose so.

Mr. COWAN: I would move we meet on Tuesday, so as not to keep them any longer than we can help.

Mr. BLAIR: I think it would take pretty nearly one day's sitting to hear Mr. Côté. He can probably go into every phase of the Alberta situation.

The CHAIRMAN: Can we meet on Wednesday?

Mr. COWAN: I think, Mr. Chairman, we ought to hold our meetings as frequently as possible because we have a great deal of work to do. I am prepared to give up anything else in order to meet as often as we can.

The CHAIRMAN: My own idea is that we should meet as frequently as possible. If there are any days we find it impossible to meet owing to other meetings it can be arranged. I will ask Mr. Dick to come on Wednesday. Now, if the committee is going very far in this matter we will have to meet often and be prompt in our attendance.

S. J. Cook, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. I am chief of the Mining, Metallurgical and Chemical Division of the Dominion Bureau of Statistics.

Q. How long have you occupied that position?—A. Since it was created a year ago. I was formerly the Chemist in the Food and Drug Laboratories. The possible repetition of a fuel famine in Canada similar to that which preceded the appointment by the Dominion Government of a Fuel Controller three years ago, demands that some definite constructive action be taken to ensure continuity of fuel supply for commercial and domestic uses in this country. The problem is not a simple one, and the appointment by Parliament of a Special Committee to consider this subject will probably prove to be only an initial step towards a satisfactory solution, if, indeed, one be reached. In the past, during times of plenty, few people have been interested in plans for the prevention of shortage, and when the fuel supply ran low, temporary measures had to be adopted of necessity.

During the recent administration of fuel control in Canada under Mr. C. A. Magrath, the necessity of maintaining complete records of all data relating to coal production in this country and imports from the United States in readily available tabular form was so emphasized that the principal records inaugurated under that regime were merged with those previously compiled in the Dominion Bureau of Statistics, and when the Mining Division of the Bureau was established last year, the collection of adequate records of coal supply was one of the first matters given attention. The whole of this work is now on a permanent basis, and the several Government Departments interested are being served through the co-ordination of Provincial and Dominion effort made possible by the Bureau.

Organization of Work

For the information of the Committee, it has been thought advisable briefly to review the scope of the work now being done.

Output and disposition of coal figures are obtained each month by the Bureau through the co-operative assistance of the several Provincial Departments administering the mining laws in the coal-producing provinces. This scheme, inaugurated in January, 1920, provides for the collection of production data from the mine operators by Provincial officers, thus ensuring the highest degree of reliability in the data collected. Returns are obtained in duplicate, and one copy, after vise by the Provincial officers, is forwarded to Ottawa for compilation with the data from the other provinces, by the trained staff of the Mining Division. This plan has resulted favourably, not the least of the advantage gained going to the mine operator, who now completes one form each month, knowing that he will not be required to do the same work over several times more for other Government Departments.

Recently a slight expansion in this work was made, so that now records of daily outputs from every mine in Canada are available.

Imports of coal into Canada, and exports therefrom, are supplied to the Bureau twice a month through the courtesy of the Department of Customs. These figures are absolutely up to date and all coal coming into Canada from the United States is shown by quantities and kinds for each port of entry. Exports of coal produced in Canada are also shown by quantities shipped through each port of exit.

This continuous survey of the coal supply enables the Government in times of shortage to act wisely in the administration of fuel control. Beyond this measure of preparedness for action in case of emergency, little has yet been done. But now the possibility of the prevention of such fuel famines is to be discussed, and it is hoped that some definite constructive plan may be evolved.

[S. J. Cook.]

The Coal Situation in Canada

Passing now to the consideration of the situation in Canada, we find conditions at the moment for the most part, very satisfactory. Coal mining in Canada has been subject to many vicissitudes, and yet in spite of all, the output from Canadian mines during the calendar year 1920, exceeded that of the previous year by over three million tons, and was greater by over one and one-third million tons than the output in 1913, when the previous high record was established. Exports during 1920 rose over half a million tons to 2,555,223 tons, and imports from the United States, amounting to 20,815,596 tons, represented an increase of more than 22 per cent over the preceding year. In the table which follows the output of coal from the mines of each province is shown for every year from 1911 to 1920 inclusive. In addition the percentage of the total Canadian output mined in each province has been computed for each year so that the relative standing of the coal-producing provinces is readily discernible.

Then there follows a table which perhaps I might read, and on the following page there is a second table entitled "Percentage of Coal Mined in each Province during the calendar years 1911 to 1920." The total output for each year has been taken as 100 per cent, and the percentage mined in each province has been computed. These table are as follows:—

OUTPUT OF COAL FROM CANADIAN MINES, BY PROVINCES, FOR THE CALENDAR YEARS 1911 TO 1920
(Short Tons)

	Nova Scotia	New Brunswick	Sask.	Alberta	British Columbia	Yukon	Total
1911... .. Tons	7,125,551	55,781	217,193	1,565,930	2,581,369	2,840	11,548,664
1912... .. "	7,834,724	44,780	232,234	3,326,238	3,200,226	9,245	14,647,447
1913... .. "	8,135,104	70,311	219,645	4,189,536	2,897,840	20,442	15,532,878
1914... .. "	7,448,062	99,240	240,300	3,743,672	2,444,024	13,465	13,988,743
1915... .. "	7,513,739	126,923	243,125	3,390,567	2,198,355	7,487	13,480,196
1916... .. "	6,911,995	143,658	294,264	4,667,033	2,785,453	3,300	14,815,703
1917... .. "	6,345,335	189,668	360,623	4,873,637	2,660,834	5,264	14,435,361
1918... .. "	5,836,370	266,585	348,988	6,126,443	2,879,099	2,900	15,460,385
1919... .. "	5,790,196	166,377	379,347	4,933,660	2,649,516	.....	13,919,096
1920... .. "	6,416,506	171,610	335,122	6,907,765	3,091,320	.....	16,922,323

PERCENTAGE OF COAL MINED IN EACH PROVINCE DURING THE CALENDAR YEARS 1911-1920

	Nova Scotia Per cent	New Brunswick Per cent	Sask. Per cent	Alberta Per cent	British Columbia Per cent	Yukon Per cent	Canada Per cent
1911	61.8	0.5	1.8	13.6	22.3	0.0	100
1912	53.5	0.3	1.6	22.8	21.8	0.0	100
1913	52.4	0.5	1.4	26.9	18.7	0.1	100
1914	53.4	0.7	1.8	26.7	17.4	0.0	100
1915	55.7	0.9	1.8	25.3	16.3	0.0	100
1916	46.7	0.9	1.9	31.6	18.9	0.0	100
1917	43.9	1.3	2.5	33.8	18.5	0.0	100
1918	37.8	1.7	2.3	39.6	18.6	0.0	100
1919	41.6	1.2	2.7	35.5	19.0	.....	100
1920	37.9	1.0	1.9	40.9	18.3	.....	100

From the foregoing table it will be seen that the output of coal from Nova Scotia mines was over eight million tons in 1913, but under six and one-half million tons in 1920.

Before I pass that I would like to call your attention to some of the ranges of figures for the information of those who have not the figures before them. The percentage of the total coal mined in Canada which comes from the province of Nova Scotia runs as follows, under the heading "Nova Scotia"—in round figures, 62, 53, 52, 53, 55, 46, 43, 37, 41, and 38. That is to say those figures represent percentages

[S. J. Cook.]

of the total Dominion output which comes from the Nova Scotia mines, and this gradually decreasing curve—a downward curve runs from 62 per cent in 1911 to 37 per cent in 1920. At the same time Alberta has risen from 13 per cent in 1911 to 22 per cent in 1912, 26 per cent in 1913, practically the same for 1914 and 1915, 31 per cent in 1916, 34 per cent in 1917, 39 per cent in 1918, back to 35 per cent in 1919, and up to approximately 41 per cent of the total Dominion output in 1920. The other provinces have not varied to any considerable extent, British Columbia running from 22 per cent back to about 18 per cent in 1920.

Then reverting back to this paragraph which I read before I digressed. The output of some of the collieries in Nova Scotia at the present time is more variable than has been the case for a number of years.

It is difficult to say just why this should be, although it is well-known that the heavy enlistments from among the miners of Nova Scotia during the war, well-nigh demoralized mining in that Province for the time being. In addition to the difficulty of obtaining skilled miners, the mine operators were faced with transportation problems different from those of peace times, and while advantage was taken of the opportunity to develop an export trade with overseas countries, and to obtain admiralty contracts these proved to be only temporary advantages, as an embargo on the export of coal was subsequently established as one means of meeting domestic needs. Labour conditions in the Canadian coal-mining industry have also followed the ever-changing situations in the mining industry, the continent over, so that the resultant decrease in output is not surprising. The difficulty of operating in submarine areas is considerably greater than in other areas, and then may be added the statement that while employment is to be had in shallow mines men prefer not to work the deep mines. Living conditions in mining communities often are not the best, but in Cape Breton they are particularly bad. All these factors affect production in a very definite way, and these are some points that must be taken into consideration when the general problem of fuel supply is under discussion.

Nova Scotia mines given time and money for proper development and a sufficiency of labour could probably produce in the neighbourhood of ten million tons annually. This quantity would completely meet the needs of Nova Scotia, New Brunswick, Prince Edward Island, Quebec, it being assumed that anthracite is not essential and would leave some over to go to Ontario. Or, if Quebec prefers to continue its importation of anthracite, then a further million tons of Nova Scotia bituminous would be available for Ontario's consumption.

The possible output of coal in Western Canada is a much more speculative matter. Certain it is that Canada possesses some 16 per cent of the world's coal resources in this Western field, but the output last year of 6.9 million tons shows an advance of 40 per cent over the 4.9 million tons in the preceding year. Conditions in the coal mining areas of the West are not at all comparable with those of Nova Scotia, and recognition of this fact brings the first evidence of the complexity of the problem.

IMPORTS AND EXPORTS.

During the past six years Canada has imported from the United States, bituminous coal in quantities varying from nine million tons in 1915 to seventeen and one-quarter million tons in 1918. It might be interjected here that 1918 was, of course, the year when Mr. Magrath controlled the fuel situation in Canada.

Anthracite imports varied during the same years from four millions in 1915 to five and one-third in 1917. The importations of coal from the United States during the past six years into each province are shown on the next page, division being made to show the kinds of coal.

I take it it is not the desire of the committee that we should read this entire page of figures, you all have a copy before you.

Mr. COWAN: I think it is mighty good evidence.

[S. J. Cook.]

WITNESS: This has been divided, you will observe, under provincial headings, and half-way down the page you will see "Central Ontario." Now, Central Ontario means Ontario east of Fort William and Port Arthur, but exclusive of two ports. They are the two ports included under the item "Head of the Lakes."

By Mr. Keefer:

Q. What about Jackfish?—A. That is not a customs port.

Q. They take in all of the coal for the C. P. R. east and west there?—A. The items given here are computed from data supplied to us by the Department of Customs, and the ports given here are the customs ports.

Q. It would be a sub-port of Port Arthur?—A. Yes, the details for Ontario are given there. For those of you who want to get at that total, following the item "Manitoba" there is a second item showing "Manitoba, plus the head of the Lakes," because a large part of the coal that is entered at Fort William and Port Arthur goes to Manitoba, and it is our custom to compute together "Manitoba" and "The head of the Lakes" as one district, leaving the rest of Ontario under the one heading "Central Ontario."

The imports of coal for the Dominion for the past six years are shown to have grown from 13,000,000 in 1915 to nearly eighteen millions in 1916, twenty-two and a half millions in 1917, twenty-two millions in 1918, seventeen millions in 1919, and nearly twenty-one millions in 1920.

Q. Can you explain the cause of the decrease between 1917 and 1920? Was it due to conservation in the consumption? There is an importation of two million tons less. Did they bring that from the Maritime Provinces?

Mr. HOCKEN: It is four million tons.

Mr. KEEFER: Yes, four million tons.

Q. What would be the reasonable explanation of this four million tons less in 1920? Have you any idea? I know that the United States cut off their supply and decreased it by a certain percentage each year for a while?—A. You have, in that gap, between 1916 and 1917 an increasing fuel problem which led to the appointment of Mr. Magrath for the purpose of getting enough fuel to operate.

Mr. KEEFER: Not only did they get all they previously got in 1916: they had a decrease because the Fuel Administration would not allow it to come. That might be one explanation. I was wondering if you knew anything about it.

The WITNESS: I think that is probably due to a decrease in consumption.

Mr. KEEFER: Or rather a substitution? You had to burn a lot of other things.

The WITNESS: No, the closing down of the munitions plants and the consequent decrease in the needs.

Mr. HOCKEN: Twenty per cent? That is pretty big.

Mr. KEEFER: It would not be that.

The CHAIRMAN: Suppose you let Mr. Cook continue his statement and we will get the evidence in better form.

The WITNESS: Following this detail there is a second, in which the imports of coal into Canada from the United States have been analyzed to show the grade of coal imported under the heading "Screen Sizes and Slack for Anthracite," and "Lump and Slack for Bituminous." Those details show the importations into each of the provinces as before, but it applies only to 1920.

IMPORTS OF COAL BY PROVINCES

Short Tons

	1915	1916	1917	1918	1919	1920
Nova Scotia—						
Anthracite. . . .	84,789	90,711	71,263	43,789	60,095	45,334
Bituminous. . . .	471	4,153	26,326	1,097	4,076	3,044
Total. . . .	85,260	94,864	97,589	44,886	64,171	48,378
New Brunswick—						
Anthracite. . . .	104,418	101,285	100,555	71,451	66,898	57,859
Bituminous. . . .	888	12,396	21,904	5,035	11,751	936
Total. . . .	105,306	113,681	122,459	76,486	78,649	58,795
Prince Edward Island—						
Anthracite. . . .	17,631	15,821	5,147	5,105	9,574	5,544
Bituminous. . . .	26	41	.....	.....	142	513
Total. . . .	17,657	15,862	5,147	5,105	9,716	6,057
Quebec—						
Anthracite. . . .	1,168,168	1,292,744	1,664,095	1,500,664	1,378,460	1,544,456
Bituminous. . . .	926,148	2,427,929	4,084,255	4,033,618	2,673,819	3,503,410
Total. . . .	2,094,316	3,720,673	5,748,350	5,534,282	4,052,279	5,047,866
Central Ontario—						
Anthracite. . . .	2,398,129	2,539,807	2,963,940	2,842,964	2,978,472	2,945,782
Bituminous. . . .	6,638,710	8,294,959	10,263,444	10,994,289	7,700,935	10,373,824
Total. . . .	9,036,839	10,834,766	13,227,384	13,837,253	10,679,407	13,319,106
Head of Lakes—						
Anthracite. . . .	280,615	499,843	493,424	315,509	465,676	285,632
Bituminous. . . .	1,401,563	2,432,269	2,380,544	2,206,042	1,547,784	1,963,579
Total. . . .	1,692,178	2,932,112	2,873,968	2,521,551	2,013,460	2,259,261
Total Ontario—						
Anthracite. . . .	2,678,744	3,039,650	3,457,364	3,158,473	3,444,148	3,241,464
Bituminous. . . .	8,040,273	10,727,228	12,643,988	13,200,331	9,248,719	12,336,903
Total. . . .	10,719,017	13,766,878	16,101,352	16,358,804	12,692,867	15,578,367
Manitoba—						
Anthracite. . . .	18,191	33,664	21,106	2,822	12,906	17,509
Bituminous. . . .	61,195	104,235	420,803	28,234	62,746	43,547
Total. . . .	79,386	137,899	441,909	31,056	75,652	61,056
Man. and Head of Lakes—						
Anthracite. . . .	298,806	533,507	514,530	318,331	478,582	313,191
Bituminous. . . .	1,462,758	2,536,504	2,801,347	2,234,276	1,610,530	2,007,126
Total. . . .	1,761,564	3,070,011	3,315,877	2,552,607	2,089,112	2,320,317
Saskatchewan—						
Anthracite. . . .	5	58	9	37	.....	206
Bituminous. . . .	781	721	745	419	1,406	535
Total. . . .	786	779	754	456	1,406	741
Alberta—						
Anthracite.	66	517
Bituminous. . . .	1,011	251	749	913	1,131	607
Total. . . .	1,011	251	749	913	1,197	1,124

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IMPORTS OF COAL BY PROVINCES—*Concluded*

Short Tons

	1915	1916	1917	1918	1919	1920
British Columbia—						
Anthracite.	84	281	149	227	136	75
Bituminous.	15,453	12,382	20,943	4,784	6,700	13,128
Total.	15,537	12,663	21,092	5,011	6,836	13,203
Yukon—						
Anthracite.						
Bituminous.	85	494	111	55		9
Canada—						
Anthracite.	4,072,030	4,574,214	5,319,688	4,782,568	4,972,283	4,912,964
Bituminous.	9,046,331	13,289,830	17,219,824	17,274,486	12,010,490	15,902,632
Total.	13,118,361	17,864,044	22,539,512	22,057,054	16,982,772	20,815,596

ANALYSIS OF IMPORTS OF COAL DURING 1920

ANTHRACITE BITUMINOUS

Provinces	Screened Sizes	Slack	Lump	Slack	Total Coal
Nova Scotia.	45,334		2,784	260	48,378
New Brunswick.	57,859		936		58,795
Prince Edward Island.	5,544		513		6,057
Quebec.	1,185,674	357,782	3,100,196	403,214	5,047,866
Central Ontario.	2,828,893	116,889	8,622,771	1,750,553	13,319,106
Head of Lakes.	295,682		1,874,880	88,699	2,259,261
Total Ontario.	3,124,575	116,889	10,497,651	1,839,252	15,578,367
Manitoba.	12,520	4,989	23,601	19,946	61,056
Manitoba and Head of Lakes.	308,202	4,989	1,898,481	108,645	2,320,317
Saskatchewan.	162	44	535		741
Alberta.	341	176	348	259	1,124
British Columbia.	75		9,372	3,756	13,203
Yukon.			9		9
Total for Canada.	4,433,034	479,880	13,635,945	2,266,687	20,815,596

Ontario naturally leads in the amount of coal imported, the anthracite item for 1920 being 2,945,782 short tons for Central Ontario or slightly less than the 1919 importations of 2,978,472 tons. More bituminous coal was brought into Ontario in 1920 than in the previous year, the quantities for the two years being 10,373,324 short tons in 1920 and 7,700,935 tons in 1919, but the importations did not come up to the 1918 record when Central Ontario (less Head of Lakes) imported 10,994,289 short tons of soft coal.

Importations of bituminous coal from the United States into the Province of Quebec showed an increase during 1920 as compared with 1919, the total figures being 3,503,410 short tons in 1920 as against 2,673,819 tons in 1919. Anthracite importations also increased, the totals for the two years being 1,544,456 tons in 1920 and 1,378,460 tons in 1919.

Bituminous coal imports into the whole of Canada amounted to 15,902,632 tons in 1920 compared with 12,010,490 tons in the preceding year. Anthracite imports were slightly lower at 4,912,964 tons in 1920 and 4,972,283 tons in 1919.

Mr. ROSS: That does not mean anything, unless you can give us some reason for it. Can you give us some reason for that? Is there anything to which that can be ascribed? I think Mr. Keefer's question is pretty pertinent.

The CHAIRMAN: Perhaps I might explain to the Committee that Mr. Cook does not pretend to be an authority on anything but statistics.

Mr. KEEFER: He is a member of the Mines Department.

Mr. DOUGLAS: It would no doubt be due in part to the strike in 1918.

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Mr. KEEFER: They were getting less coal.

Mr. ROSS: What I am trying to get at is that I noticed there was a great increase in the use of bituminous coal, and I was wondering if people were bringing themselves to substitute bituminous instead of anthracite.

Mr. KEEFER: That would not work out, because they increased the bituminous. That would not be the reason.

Mr. COWAN: It says that the anthracite imports were slightly lower, which would bear out what Mr. Ross is saying.

Mr. ROSS: That is what I mean. Are the people learning to use it?

Mr. KEEFER: During the year we had to close up the theatres and places like that; there was a great conservation of fuel.

Mr. COWAN: Yes, but the anthracite coal would be generally used for domestic purposes, power and so on.

Mr. KEEFER: I think perhaps we had better not interrupt this witness further.

The CHAIRMAN: I think perhaps we will have subsequent witnesses who will explain these things from actual knowledge.

The WITNESS: I have attended in this review not so much to discuss these facts as to put them before you. Production in the United States at the close of 1920 was stated by the United States Geological Survey to be limited chiefly by demand, the car and labour supply being ample to meet all calls. The mildness of the winter has also made it possible to accumulate stocks.

The exports of Canadian coal given by provinces show a total export in 1919 of 2,070,050 tons, and in 1920 2,558,223 tons, an increase of approximately half a million tons.

EXPORTS OF CANADIAN COAL

(Short Tons)

Province of Exit	1919	1920
Nova Scotia.. . . .	994,107	1,245,673
New Brunswick.. . . .	59,090	113,050
Prince Edward Island .. . . .	.....	2
Quebec.. . . .	929	1,372
Ontario.. . . .	5	.....
Manitoba.. . . .	167	721
Saskatchewan.. . . .	389	3,132
Alberta.. . . .	1,022	3,106
British Columbia.. . . .	1,014,201	1,191,103
Yukon.. . . .	140	64
Total.. . . .	2,070,050	2,558,223

An analysis of the foreign exports of Canadian coal during the year shows Nova Scotia as the principal coal-exporting province, with shipments out of the province for foreign destination mounting to 1,245,673 short tons as against 994,107 tons in the previous year.

Mr. ROSS: Where to? Mr. Cook can you tell us?

The WITNESS: I would not like to put that in the records, but a large part of it went to Europe for Holland and Denmark. I think I can get you the exact figures exported to these countries if you want them.

Mr. ROSS: I think it would be a good thing to know.

The WITNESS: I believe a great part of it went to Holland and Denmark.

[S. J. Cook.]

By Mr. Keefer:

Q. And some to Italy?—A. Yes.

British Columbia comes a close second with 1,191,103 short tons to its credit in 1920, and 1,014,201 tons in 1919.

You will see from the table that in 1919 British Columbia was the principal exporting province although not very much in excess of Nova Scotia.

From the data available a figure which has been called "Coal Supply" has been determined for each Provincial Division; British Columbia and the Yukon being considered a unit for this purpose, and Ontario west of, and including Fort William and Port Arthur being counted in the same district as Manitoba, leaving the remainder of Ontario under the heading "Central Ontario."

On the same basis, a separation of data has been made to show Eastern Canada's supply apart from that required in Western Canada, the arbitrary line being drawn through the ports at the head of the lakes with Fort William and Port Arthur included in the Western Division.

In explanation of the terms used in this table the following definitions are given:

Output.—The total quantity removed from the mine, including waste. Data from operators' Monthly Statement.

Now these figures differ from the figures which you will see quoted sometimes, "production" which is ordinarily defined to be sales and shipments. I make that explanation so that you will not be confused.

The CHAIRMAN: So that the output is the quantity—

The WITNESS: Everything that comes out of the mine.

By the Chairman:

Q. What they use as their own fuel too?—A. Everything, including also the waste which is picked out and sent to the dump. It is really the amount of coal which is paid for—the amount of coal taken out of the mine which is paid for.

Imports.—Total cost crossing the border from the United States warehoused, i.e. not yet cleared from custom: customs data.

This data is supplied to us every two weeks, or rather twice a month, by the department of Customs.

These imports differ from the figures which you will get in the monthly reports of the trade of Canada of imports, because there they are called imports for the consumption that refers only to coal which has been cleared through the customs. In the matter of anthracite these two items are practically identical because there is no duty on anthracite, but in the matter of bituminous coal on which there is a duty of 53 cents per ton, a great many firms import the bituminous coal and warehouse it. "Warehouse" is a customs term, and they "warehouse" it until such time as it is required. For instance, at the head of the lakes where the coal is brought in during the season of navigation, a large part of that is not cleared from customs until perhaps the following January or February. The figures which I have given here refer to the coal which is received in each of the ports or in each of the provinces. It refers to the actual coal brought in regardless of whether it has been cleared from customs or not. These are all imports for the customs, and none of the coal under this heading "Imports" is re-exported.

Exports.—Coal from Canadian mines actually shipped out of Canada for foreign destinations. Also customs data.

Shipments.—Received from and sent to other provinces. Data from coal operator's monthly statements supplied to the Bureau and they are the figures which each coal operator sets down to cover the districts of his interprovincial shipments. Each

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man says an hundred tons or a thousand tons, as it may be, and if he is a miner in Alberta, shipping to Saskatchewan or Manitoba he so states, and we have computed the interprovincial figures from these figures. They are as nearly comparable as we can get them. Then there are these figures called "the coal supply" which has been computed. This has been done by adding the data of imports and the shipments received from other provinces and deducting the exports and shipments out of the provinces referred to. It is not in a sense a consumption figure but it is an attempt to arrive at a figure which shall represent that amount of coal within the boundaries themselves, or divisions during a period of years. I have that charted which makes it a little more clear. I had to do this in a hurry and did not have a great deal of time to put on the work, but I will spend a minute or two outlining this.

(Referring to chart). This chart shows the data which are given to you in the review entitled "Canadian Coal Supply".

By Mr. Keefer:

Q. Can you not make a tracing and blueprint and supply us with a copy?

Mr. COWAN: Yes, then we could have it for reference at any time we want it.

Mr. KEEFER: It could be handed in along with this report that you have been good enough to supply us with. Make a tracing on linen paper and have it blue-printed.

The WITNESS: Yes. The basis on which this is made is as follows: The chart has been constructed in this way; a base line has been taken, and above this base line the output of coal from the coal-producing provinces has been shown. This column of "output" has been divided into sections, to indicate what portion of the output has been shipped interprovincially, what portion of the output has been exported from Canada, and what portion remains in the province. Below the base line the imports of coal from the United States have been shown within the first section, and shipments received from other provinces have been shown in succeeding sections. Thus, by taking this middle section, above and below the base line, you obtain the coal supply area, or the area which represents the coal supply. Your first column shows the data for British Columbia and the Yukon, and each succeeding column across the page relates to the provinces which follow in geographical order across the continent. Here (indicating), for instance, is Ontario, with the entire coal supply shown as imports from the United States, with the exception of a very small quantity which is received from other provinces.

By Mr. Keefer:

Q. If you have finished your report, there are one or two questions I would like to ask.—A. I have just a little more of this report.

The Canadian coal supply is as follows:—

During 1920 (Short Tons)

	Output	Imports	Provinces Shipments Received from other	Provinces Shipments to other	Exports	Coal Supply
Nova Scotia—						
Anthracite.. ..		45,344	.....	.....	.....	.....
Bituminous.. ..	6,416,506	3,044	664	1,408,410	.....	.....
Total	6,416,506	48,378	664	1,408,410	1,245,673	3,811,465
New Brunswick—						
Anthracite.. ..		57,859	.....	.....	.....	.....
Bituminous.. ..	171,610	936	1,032,996	38,842	.....	.....
Total	171,610	58,795	1,032,996	38,842	113,050	1,111,509

During 1920 (Short Tons).—Continued

	Output	Imports	Provinces Shipments Received from other	Provinces Shipments to other	Exports	Coal Supply
Prince Edward Island—						
Anthracite.. .. .		5,544	.....	.....	.....	.....
Bituminous.. .. .		513	120,670	.....	.....	.....
Total		6,057	120,670	.....	2	126,723
Quebec—						
Anthracite.. .. .		1,544,456	.....	.....	.....	.....
Bituminous.. .. .		3,503,410	281,302	.....	.....	.....
Total		5,047,866	281,302	.....	1,372	5,327,796
Central Ontario—						
Anthracite		2,945,782	.....	.....	.....	.....
Bituminous.. .. .		10,373,324	11,620	.....	.....	.....
Total		13,319,106	11,620	.....	.....	13,330,726
Eastern Canada—						
Anthracite.. .. .		4,598,975	.....	.....	.....	.....
Bituminous.. .. .	6,588,116	13,831,227	1,447,252	1,447,252	.....	.....
Total	6,588,116	18,480,202	1,447,252	1,447,252	1,360,087	23,708,221
Head of Lakes—						
Anthracite.. .. .		295,682	.....	.....	.....	.....
Bituminous.. .. .		1,963,579	629	.....	.....	.....
Lignite.. .. .		.....	14,271	.....	.....	.....
Total		2,259,261	14,900	.....	.....	2,274,161
Manitoba—						
Anthracite.. .. .		17,509	1,356	.....	.....	.....
Bituminous.. .. .		43,547	259,065	.....	.....	.....
Lignite.. .. .		.....	604,465	.....	.....	.....
Total		61,056	864,886	.....	721	925,221
Saskatchewan—						
Anthracite.. .. .		206	4,657	.....	.....	.....
Bituminous.. .. .		535	176,616	.....	.....	.....
Lignite.. .. .	335,122	.....	1,138,600	151,019	.....	.....
Total	335,122	741	1,319,873	151,019	3,132	1,501,585
Alberta—						
Anthracite.. .. .	127,513	517	.....	11,072	.....	.....
Bituminous.. .. .	3,419,147	607	9,278	666,565	.....	.....
Lignite.. .. .	3,361,105	.....	599	1,658,895	.....	.....
Total	6,907,765	1,124	9,877	2,036,532	3,106	4,879,128
British Columbia and Yukon—						
Anthracite.. .. .		75	5,059	.....	.....	.....
Bituminous.. .. .	3,091,320	13,137	69,225	148,248	.....	.....
Lignite.. .. .		.....	51,979	.....	.....	.....
Total	3,091,320	13,212	126,263	148,248	1,191,167	1,891,380
Western Canada—						
Anthracite.. .. .	127,513	313,989	11,072	11,072	.....	.....
Bituminous.. .. .	6,510,467	2,021,405	514,813	514,813	.....	.....
Lignite.. .. .	3,696,227	.....	1,809,914	1,809,914	.....	.....
Total	10,334,207	2,335,394	2,335,799	2,335,799	1,198,126	11,471,475
Total Dominion—						
Anthracite.. .. .	127,513	4,912,964	.....	.....	.....	.....
Bituminous.. .. .	13,098,583	15,902,632	.....	.....	.....	.....
Lignite.. .. .	3,696,227	.....	.....	.....	.....	.....
Total	16,922,323	20,815,596	.....	.....	2,558,223	35,179,696

1. THE PROBLEM OF FUEL SUPPLY IN CANADA

It has been stated that the problem of fuel supply in Canada is many sided, and in the limited time allowed in which to prepare this review, it has not been possible to do more than sketch a few of the phases which confront the student of fuel supply.

Taking into consideration the value of coal imports, exports and output, the net "problem" involves amounts of money in excess of 150 million dollars. Of this sum over 76 millions relate to Canadian output. In other words, the problem is worthy of much more consideration than can possibly be given to it by a Parliamentary Committee in the few hours provided.

As a plan of definite constructive policy, it is suggested that this Committee recommend that a thorough investigation of the whole problem be undertaken at once under the direction of one fully conversant with the ramifications of the coal mining industry. Every facility should be provided the investigator, the only stipulation being that his report shall be comprehensive and authentic and that it shall contain definite recommendations for the guidance of the Committee in the preparation and presentation to Parliament of any legislation found necessary. The varying needs of the mines in the several provinces would be found; the transportation question dealt with; the methods of mining studied, and perhaps changes suggested; industrial conditions in mining centres would be surveyed; and last, and as important as any other, the better utilization of fuels would be planned along the lines of the best-known engineering practice. And by that I do not mean only work similar to that which is being done in the West under the Research Council in connection with the briquetting of lignite, and the carbonizing of lignite, although valuable work has been done there, but the better utilization of fuel in power plants and for other industrial uses. I think I saw it stated somewhere recently that has accounted for the saving of from fifteen to twenty per cent.

MR. KEEFER: That is what I was getting at. I know there has been a decided saving.

WITNESS: The use of chain grates and automatic stokers have made it possible to cut down the fuel cost appreciably in a large number of industrial plants. These are questions which I think ought to be gone into very thoroughly. These and innumerable other points would be carefully looked into in co-operation with representatives from Government bureaux, the mining world, and professional organizations interested, and the report would be, as many others have been, a guide to well-considered policies, the results of which would prove of inestimable value for all time to come.

Now, a good deal of investigatory work has been done by various departments and various appointees of the Dominion Government and the reports presented by these various people have already been of considerable value, but it seems to me that this Committee would be well advised to obtain the services of one whose merit is beyond question, a man who is fully conversant with the whole field, or as nearly fully conversant as any one man can be; give him full authority to make a thorough investigation and bring his suggestions to you. I think that is the best advice I can give you.

By Mr. Keefer:

Q. Mr. Cook, we appreciate your report very much. It shows a lot of work. It will be very useful to us hereafter, but dealing with the last point which you have given us, have you any idea of the length of time involved by such an investigation? —A. Under a year.

Q. Then we cannot consider getting anything definite in shape for the next two or three months before this Committee?—A. I would not think so. I would think it would be nearer eight months than six.

[S. J. Cook.]

Q. But it is chiefly co-ordinating the different data?—A. Quite so. It is a matter of co-ordination largely, and I think the operators in various coal-producing provinces would appreciate that kind of work.

Q. Have you any idea which governmental department could best take that on, because we do not want to go outside of the Government if we can make use of our own officials?—A. No matter which way I answer I will get into difficulties there; there are several departments—

Q. It is a matter of departmental jealousy?—A. No, I would not say it is a matter of departmental jealousy. Several departments already have charge of various fields; for instance, the Mine Lands and Yukon Branch of the Department of the Interior has jurisdiction over the Crown lands in the west, and then you have your Department of Mines—

The CHAIRMAN: I was going to say that before Mr. Cook left he is open for any question any member wishes to ask.

Mr. COWAN: I would like to ask him two or three questions in regard to the reported increase of bituminous coal used in the province of Quebec. Naturally we would want to see the Nova Scotia coal sold there. The question is as to whether or not the quality of this bituminous coal is as good as that from Nova Scotia.

Q. Do you know from what mines in the United States that bituminous coal comes—in order that we may later on get a proper analysis of that coal. You do not know the source of it at all?—A. This Canadian supply comes almost exclusively from Pennsylvania, West Virginia and Ohio. I think the question of quality does not come in. The coal of Nova Scotia is of high quality. During the war, as you remember, the British navy used Sydney coal for the first time in history. Previously all the coal for the navy was either from the Pocohantas district in Pennsylvania or from Wales, but during the war the shortage of the Welsh supply made it necessary for the navy to bunker at Sydney; the naval vessels made their own steam with Sydney coal.

Q. All that coal has to be brought by rail from Pennsylvania and Virginia into Quebec, and the only thing they would have to compete with that would be the water rate from Cape Breton into Quebec?—A. The cost of production also varies in Nova Scotia; the cost of production is high in Nova Scotia.

By Mr. Keefer:

Q. Are they per ton higher?—A. I don't know.

The CHAIRMAN: I do not like to restrict the inquiry too much, but we will have other witnesses here on subsequent days who can give us authoritative evidence on that, and I presume, while not minimizing Mr. Cook's opinion, that he cannot speak with authority on matters of that kind.

Mr. MAHARG: Mr. Chairman, would it be proper to invite the explanations of the witness to any statements in his report?

The CHAIRMAN: Yes.

By Mr. Maharg:

Q. You say "the possible output of coal in Western Canada is a much more speculative matter." What is your reason for making that statement?—A. Coal is much more available in Alberta than in Nova Scotia. The mines are more shallow, and a great many of the lignite supplies outcrop, so it is possible for a farmer to dig in and get his own supply, and in some places in the West it has been found that the underlying stratum of coal is of better quality than the upper grade, and a company has gone down through to the lower levels and got a better grade of coal. I understand that that makes it very difficult to mine out these upper layers of coal, and it seems a great deal of work may be done in the improving of mining methods

[S. J. Cook.]

and perhaps a compulsory use of good engineering practice. A large number of the miners in Alberta are not intelligent miners; that is to say, there are some three hundred mines and a great many of these mines are operated by people whose knowledge of the English language is very limited, and my understanding is that they have sort of "pock-marked" the country and made it impossible for good engineering practice to be followed subsequently. That is to say, they ruin more coal lands than they use.

By Mr. Maharg:

Q. When you use the word "possibly" you express a doubt?—A. It is a matter of mining methods rather than supply. There is no doubt that Alberta contains in the neighbourhood of 16 per cent of the world's supply.

Q. Is there a doubt in your mind as to increasing the output of the Alberta mines?—A. It depends on the methods followed. There can be no doubt but that these methods are available and can be put into operation. They have not been put into operation, and if they are not the production will not increase. If that whole province is thoroughly mined in the light of the best engineering practice—

By Mr. Keefer:

Q. You mean it is due to the lack of scientific mining?—A. Quite so.

By Mr. Cowan:

Q. Is it not due to the fact that most of the mines in Alberta are conducted by small companies—

The CHAIRMAN: If I may interject another remark here: on Tuesday we will have representatives from the Alberta Government, experts, who will take up the Alberta situation. Would we not get more relevant information from them than from Mr. Cook?

By Mr. Ross:

Q. You are not a mining expert?—A. No.

Q. You have not been out there?—A. No.

By Mr. Cowan:

Q. You said that living conditions in Cape Breton were very bad. What do you mean by that?—A. That about thirty-five per cent of the houses in Sydney have no sewage connection.

Q. Do you mean to say that the Provincial Government permits that?—A. These are the conditions as they exist.

Q. Is the company doing anything to put them into a more livable condition?—A. I would not like to commit myself on that, because the company owns a great many of the houses, and it is a question whether the company ought to spend more money on these houses, or whether because the company has spent so much the miners will not spend anything themselves. Certainly, the conditions in Sydney are—

Mr. HOCKEN: Absolutely rotten; I have been down there.

WITNESS: I think that is a pretty safe statement.

By Mr. Cowan:

Q. In your opinion that is partially responsible for the high cost of coal there and the lessened production?—A. I think bad living conditions tend to promote industrial unrest, and when the miners are not getting coal—

Mr. DOUGLAS: I don't wish to correct you, but for the sake of the record I think your statements should be more accurate. Sydney is not where the coal is produced.

[S. J. Cook.]

WITNESS: I was referring to the Glace Bay district. I had that in mind. Perhaps the record had better show Glace Bay instead of Sydney.

Q. I think you said in the neighbourhood of 35 per cent of the houses were bad?

—A. In that neighbourhood.

Q. You might well say "all," because that is a fact.

The CHAIRMAN: Is this not illustrative of where you are questioning the witness on something upon which he has no accurate information?

Mr. MAHARG: We assume that the witness who hands in a written report and makes statements on it is more or less familiar with the conditions.

The CHAIRMAN: Is there anything further you wish to ask Mr. Cook?

Mr. KEEFER: We can bring Mr. Cook back and catechise him thoroughly on this point.

Mr. HOCKEN: Has the department any information as to the economies to be effected by the construction of a central heating plant and the conservation of coal in that way? I am asking you if you have any information in your department on that.—A. We have not in our department.

The CHAIRMAN: We will now adjourn until 10.30 to-morrow morning.

The Committee adjourned until Thursday, April 14, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

THURSDAY, April 14, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: We have Mr. Vaughan, Vice-President of the Canadian National Railway, present this morning, to give evidence.

Mr. R. C. VAUGHAN, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. Vice-Chairman in charge of purchases and supplies, Canadian National Railway.

Q. Have you a statement prepared for the Committee?—A. Well, I have some statements here. I assume one of the first things you want to know is the quantity of coal used by the Canadian National Railway.

Q. Would you follow these questions or would you prefer following your own documents?—A. Whichever you wish, I have not a copy of these questions, but if you wish to ask me the questions in the order they are named, the first question here is total mileage—you have that?

Q. Yes.—A. Total consumption; I have a statement showing the consumption of the Canadian National Railway for the years 1919 and 1920, and it shows separately the quantity of United States coal used, the quantity of coal bought in Eastern Canada, and the quantity of Canadian coal bought in Western Canada. The year 1920 includes the Grand Trunk Pacific, which accounts for the extra quantity, but I think that statement is self-explanatory.

By Mr. Cowan:

Q. Could we have it read, so that we could get it into our heads?—A. Canadian National Railway; total tonnage received during the seasons 1919-20 and 1920-21. We used for the period from April 1, 1919, to March 31, 1920—I should not say we used—this was the coal received during that year, 1919-20; we received American coal, 1,099,824 tons. We received Canadian coal from Eastern Canada 914,425 tons, and we received Canadian coal from Western Canada 411,301 tons, making a total of 2,425,550 tons. It should be explained here, probably, that we began the year 1919 with a considerable stock of coal on hand. If we had not that stock we would have taken in a little more than that for that period. Now for the year ending March 31, 1921, we took in, of the United States coal, 1,312,872. We purchased coal in Eastern Canada,—that is Canadian coal—1,064,690 tons, and we purchased from the mines in Western Canada, 1,147,280 making a total of 3,524,842. The year 1920-21 includes the Grand Trunk Pacific Railway.

Mr. COWAN: Are we expected to ask questions on each point as it is submitted?

The CHAIRMAN: Yes, if we confine ourselves strictly to that. You have a list of the questions to be dealt with by Mr. Vaughan. Perhaps it would be well to ask questions on that point.

By Mr. Cowan:

Q. At what point did you receive this American coal?

The CHAIRMAN: That will come later.

By Mr. Douglas (Cape Breton):

Q. On that question what would you say?—A. On that question I should answer this way; the larger part of American coal from the West, in fact all the coal from the West is taken in through Port Arthur and Fort William, and the coal from the East is used, some in Toronto, some in Montreal, some in Drummondville and Ste. Hyacinthe and Cobourg.

By Mr. Cowan:

Q. Do you know what part of the United States that coal comes from?—A. Yes.

Q. How long a rail haul would they have from the mine to the lake shore?—A. I cannot give you the rail haul, but I can give you approximately the freight rate.

Q. I want to find out what the difference is between the American price—A. The coal that comes to Port Arthur and Fort William is shipped from Pennsylvania and Ohio to lake Erie ports. The average freight rate is about \$1.95. I should say, from the mines to lake Erie, and the boat freight from lake Erie to Port Arthur and Fort William, was 50 cents.

By Mr. Blair:

Q. How far west of Fort William and Port Arthur is that coal used?—A. We have only been using it as far west as Winnipeg for the last year or two, and we have been bringing the western coal as far east as Winnipeg.

By Mr. Douglas (Cape Breton):

Q. You gave the freight rate to the port and also the water rate?—A. Yes.

Q. What discharge cost would there be?—A. Well, the standard tariff at the head of the lakes—that is, Port Arthur and Fort William—is 75 cents a ton, which is supposed to represent approximately the cost; that covers discharge from the boat to the dock, storage on the dock and re-loading on the cars.

Q. What would be the charge transferring from the cars on to the boat?—A. At lake Erie?

Q. Yes?—A. That rate includes the dumping charge into the boat.

By Mr. Cowan:

Q. This coal being steam coal does not suffer any injury by being transferred so often?—A. Well there is no doubt there is some little breakage. The more frequently it is handled the more breakage there is.

Q. Is there much loss sustained in transfer?—A. The loss would be very, very small; with the machines they have at lake Erie they pick up coal cars and run them out and dump them into the boat.

Q. Can you tell me what difference there would be paying the freight from the mine in Pennsylvania and the lake cost to Fort William—how much less would that amount to than paying their own freight from the Alberta mines to that same point?—A. I can work that out for you in a second. If we figure \$1.95 on the freight rate to lake Erie and 50 cents freight rate; you get 53 cents duty; that has to be taken into consideration; you get 75 cents handling charge at the head of the lakes, and that makes the total charge on the coal, without taking exchange into consideration, of \$3.73 from the time it leaves the mine until it is put on the cars at Port Arthur or Fort William, as the case may be.

Q. What would the freight rate from the Alberta mine to that point be?—A. Approximately the mileage from the various mines in the West that produce good steam coal to Port Arthur and Fort William, would be nearly 1,500 miles; to Winnipeg it is a little over 1,000 miles, and if you work that out roughly speaking, we usually work on a seven-tenths basis; seven-tenths of a cent a mile hauling our own coal; that would make the cost of haulage of that coal \$7 a ton.

[Mr. R. C. Vaughan.]

By Mr. Douglas:

Q. You are dealing with the question of the quantity used?—A. Yes.

Q. Has the railway made any estimate of what the probable quantity used will be for the present railway year?—A. Yes, I have that here.

Q. Does that include the Grand Trunk Pacific?—A. Yes, those figures include the Grand Trunk Pacific, and the figures I will give you now include the Grand Trunk Pacific. If Mr. Douglas does not mind, I will give you that a little later. I have a statement here of the steam coal used by the Canadian National railways and showing the districts, for the years 1918, 1919, and 1920. That may be interesting in case the Committee wish to refer to it later on. I do not know whether there are any questions that you want to ask. I could read the figures.

By Mr. Ross:

Q. What are the totals?—A. It simply says that for the three years referred to we used a total of 9,780,818 tons of coal.

Q. That was for the three years?—A. For the three years. I can give you the figures for 1918. We used 3,066,679 tons of coal. For the year 1919 we used 3,073,414 tons, and for the year 1920, which includes the Grand Trunk Pacific—that is the first year that it does—3,640,725 tons.

Q. That is for the calendar year?—A. No, that is the coal year which ends on the 31st March each year.

Q. Can you give us the cost for the average year?—A. Well, I do not think I can give you the average cost of that coal. On what basis would you want the cost? Would it be out of the mines, or would it be the average price delivered on the line?

Q. I would like to know what it costs at the mines and what it costs to haul it, to get it to the places where you use it.—A. I have not that information here in that shape, but I can give you it later on. I can give you the figures at the mines. In the year 1919, for instance, coal was very plentiful. Last year was the worst year we ever had at any time in getting coal. We never experienced all during the war anything like the difficulty we had last year of getting a sufficient tonnage to meet our requirements. That was the experience of every coal consumer.

By Mr. Cowan:

Q. Do you know why?—A. There were a number of reasons. There was a tremendous demand for export coal, and the industries up to last Fall were running full blast. The car supply in the United States only averaged from 30 to 40 per cent at the mines, they had more or less labour trouble, and a combination of conditions made it very difficult to get coal.

Q. Was there equal difficulty in getting it from Canadian sources?—A. We did not have very much difficulty in getting coal from the mines in the Canadian West, but we had a good deal of difficulty in getting coal from the Nova Scotia mines.

Q. Do you know why?—A. I suppose they had a big demand for the coal. They sold some export coal and the industries I suppose were working up to capacity until last Fall. The coal situation broke over night. Coming along in November the price of spot coal in the States dropped in about 40 days from \$13.50 a ton to about \$4 a ton.

By the Chairman:

Q. You are referring to bituminous coal?—A. Yes, bituminous entirely. Our requirements of anthracite do not amount to anything worth speaking about, perhaps 10,000 tons last year.

By Mr. Ross:

Q. That statement is not divided.—A. It is divided between the Canadian Northern lines and the Canadian Government lines, that is between the eastern and the western lines.

[Mr. R. C. Vaughan.]

Q. Is it divided so far as production is concerned? What is the quantity of Canadian coal and what is the quantity of American coal?—A. I have another statement showing that.

The CHAIRMAN: We had better incorporate that statement in the record.

CANADIAN NATIONAL RAILWAYS.

STEAM COAL CONSUMED DURING YEARS 1918, 1919, 1920.

Year.	Canadian Northern Rlys.		Canadian Government Rlys.				D.W. & P.	C.N.R. C.G.R. D.W.P.
	W. Lines.	E. Lines.	Total.	W. Lines.	E. Lines.	Total.		Com- bined.
1918.....	1,133,411	434,092	1,557,503	289,909	1,165,481	1,455,390	53,786	3,066,679
1919.....	1,142,162	442,046	1,584,208	248,299	1,195,400	1,443,699	45,507	3,073,414
1920.....	1,533,791	536,471	2,070,262	317,647	1,192,300	1,509,947 (Includ. G.T.P.)	60,516	3,640,725
	3,809,364	1,402,609	5,211,973	855,855	3,553,181	4,409,036	159,809	9,780,818

By Mr. Maharg:

Q. There is one point I would like to have cleared up. When the great drop in price took place, at what point did it occur?—A. I was referring there to American coal entirely.

Q. At the mines?—A. At the mines, principally coal coming from the Pennsylvania district.

Q. It dropped from \$13 to \$4.—A. Yes, they were selling it up to \$13.50 a ton. I think that was probably the peak. A good many of the railroads and industries like ourselves were covered for coal at fairly low contract prices, and while we could not pay the extreme price we could not get what we wanted at the contract price. We covered up at about \$3 to \$3.50 a ton.

Q. At the mine?—A. At the mine. Owing to the shortage of labour, and the car supply and certain orders issued by the Interstate Commerce Board, who were controlling the movement of coal, we found very great difficulty with the other railroads in getting sufficient coal under our contracts to meet our requirements.

By Mr. Cowan:

Q. How does the price of your coal at the mines in Canada compare with the price at the mines in the United States?—A. It is very much higher, it is over double in Canada.

Q. Do you know the reason for that?—A. No, unless it is the cost of production.

Mr. DOUGLAS (Cape Breton): I think that can be brought out by the mining men.

The WITNESS: I have a statement here showing the American coal received and the points at which it was received and the points where it was used during the years 1919-20 and 1920-21. I think that will cover it pretty well. It shows the points at which the coal was received and where used.

The CHAIRMAN: Just read it please.

The WITNESS: This shows the total coal received for the year ending March 31, 1920. I am speaking of American coal. I will give the figures for 1920 and then for the year ending March, 1921. We received by water for the year ending March 21, 1920, 725,235 tons of coal. For the year ending March 31, 1921, 785,097 tons of coal. We received all-rail for the year ending March, 1920, 328,673 tons of coal and for 1921, 527,775 tons. This gives you the points where received. We received in 1919-20 through Little Current on the Algoma Eastern railway, at the head of Georgian bay,

[Mr R. C. Vaughan.]

8,135 tons. That coal was taken east through Sudbury and used in the Nipissing district on the north shore. We received in the vicinity of Montreal for the year ending March 31, 1920, 221,376 tons and for the year ending March 31, 1921, 387,279 tons. That coal was all used in the various districts in the province of Quebec, American coal. We received through Toronto and Cobourg most of the coal used in the province of Ontario. It comes over on the car ferry to Cobourg. It is the lowest freight rate. Toronto and Cobourg, 1920, 82,850 tons. Then for the year ending March 31, 1921, 140,496 tons. We received at Duluth for the year ending March 31, 1920, 135,181 tons; for the year ending March 31, 1921, 94,031 tons. That was shipped on the Duluth and Pacific railroad, which runs from Duluth to Port Francis. We received through Port Arthur for the year ending March 31, 1920, 232,352 tons; for the year ending March 31, 1921, 314,838 tons. We received through Fort William during the period ending March 31, 1920, 215,966 tons, and for the year ending March 31, 1921, 243,580 tons. That coal was all used on western lines, some of it going as far as Winnipeg and some of it coming back from Superior Junction east on the Canadian Northern. We received from Michipicoten for the year ending March 31, 1920, 49,046 tons, and for the year ending March 31, 1921, 22,097 tons. That coal is used at Cochrane and places west of Cochrane such as Hearst and through there.

By Mr. Keefer:

Q. Taken in over the Soo?—A. Yes, it was taken that way because it was a shorter haul for the railway. We used it right at the end of the Algoma Central. At Key Harbour we received for the year ending March 31, 1920, 100,742 tons, and for the year ending March 31, 1921, 106,882 tons. That was all used in the province of Ontario, Parry Sound and up that way.

By Mr. Ross:

Q. Putting your two statements together, I should judge that two-thirds of your coal is Canadian coal.—A. Yes, nearly 70 per cent of our coal last year, from 65 per cent to 70 per cent was Canadian coal that we used last year. That is out of a total used for the year ending March 31, 1921, of 3,524,000 tons, of that we used 2,200,000 tons of Canadian coal.

By Mr. Keefer:

Q. As regards the other 35 or 40 per cent, that would be chiefly coal taken in at the head of the lakes?—A. Yes, a large part of it, although owing to our inability to get a sufficient quantity of Nova Scotia coal, we have had to use fairly large quantities of American coal in the provinces of Ontario and Quebec.

Q. Practically the whole of your coal taken at the head of the lakes is American coal?—A. Practically every bit.

Q. That would apply to Michipicoten?—A. Yes, and Key Harbour; all American coal.

By Mr. Cowan:

Q. Are you in a position to say whether or not Canadian coal gives as satisfactory results as the coal you use?—A. Generally speaking, I do not think it does. There are certain coals in Canada which are pretty fair for locomotive purposes, but there are some very bad coals. The same remarks apply to out West. The general run of American coal is better in quality than the United States coal.

Q. The better mines: are they supplying sufficient quantity? Can they mine enough to do that—to satisfy your demands?—A. The Canadian mines?

Q. The mines which give the good results.—A. I think a good many of the good mines could give us more coal now. I believe the exigencies of the war at one time made it necessary for them to use a great deal of their coal for bunkering and other

[Mr. R. C. Vaughan.]

purposes down in the vicinity of Sydney, which made it necessary for us to use more American coal. I believe in 1918, there was a large quantity of American coal railed down as far as Campbellton, New Brunswick.

By Mr. Keefer:

Q. That was due to the miners being away?—A. I think the shortage of labour was one cause, and then there was a big demand for bunker coal too, and last year there was a big demand for export coal.

Q. As regards the cost between the two, the American coal and the Nova Scotia coal, how does it correspond at the pit mouth?—A. As I said before you came in, Mr. Keefer, the cost of American coal at the pit mouth is less than one-half of the Canadian coal. For instance, we can buy good American coal at a price, we will say from \$2.75 to \$3 a ton—all we want of it.

Q. This coal which you take from the United States and bring to the head of the lakes for interior consumption—you freight it to what point on lake Erie?—A. It goes to Lorain, Ashtabula, and Cleveland.

Q. What rate does it pay?—A. From the Ohio districts \$1.91½, and from what they call the Pittsburgh district it is \$1.95. I think the average rate is about \$1.95.

By the Chairman:

Q. I think you have already said that.—A. Yes, I gave those figures before Mr. Keefer came in.

MR. KEEFER: I beg your pardon, sir, I was up pretty late last night, and consequently was late this morning, and I did not hear that part of the evidence.

THE CHAIRMAN: If you will allow Mr. Vaughan to make his statements, and then question him on them, I think it would be better.

MR. KEEFER: I thought he was through.

WITNESS: I am through with that particular part of the statement.

MR. KEEFER: I thought you were all through.

WITNESS: I will file a statement for the information of the gentlemen in case they wish to use it, which is in line with what Mr. Keefer said, showing the average freight rates from the mines to lake Erie ports for the years 1912 down to 1920.

By the Chairman:

Q. You have already given us that?—A. No, but it shows that from 1912 to 1920 the freight rate from the mines to lake Erie ports has increased about \$1.08.

THE CHAIRMAN: Shall we have this read, or incorporated in the record?

MR. KEEFER: It should go in the record in detail.

CANADIAN NATIONAL RAILWAYS

Rail Freight on Coal from No. 8 Districts to Lake Ports

Year.	Freight.
1912.....	\$0.83
1913.....	0.83
1915.....	0.80
1916.....	0.83
1917.....	0.95
1918.....	1.33
1919.....	1.33
1920.....	1.91½

[Mr. R. C. Vaughan.]

By Mr. Keefer:

Q. Might I ask if the price has varied at all, as well as the rail rate?—A. The price has varied to quite a large extent. The prices have been up and down. As I was pointing out a few moments ago last year we experienced more difficulty in getting coal than at any time.

The next statement I have here, I do not think has been really asked for, but this is a statement showing coal received at various ports such as Port Arthur, Key Harbour, Michipicoten, Chicoutimi, Quebec, Montreal and Fort William. This may be useful for reference.

CANADIAN NATIONAL RAILWAYS.

COAL RECEIVED AT VARIOUS PORTS.

AMERICAN COAL.

Year.	Port Arthur.	Key Harbour.	Levis.	Michipicoten.	Chicoutimi.	Quebec.	Montreal.	Ft. William.
911.....	675,000							
912.....	470,920							
913.....	621,355							
914.....	369,523							
915.....	424,342							
916.....	601,178	77,269				43,982	24,104	
917.....	571,632	80,000				55,764	39,721	
918.....	440,827	102,705		49,268		64,367	1,496	198,756
919.....	236,333	100,742		49,046	10,011	26,779	5,227	210,329
920.....	314,838	106,882		22,097				243,580

WITNESS: I have another statement here showing the lake freight rate from lake Erie to various ports from 1912 to 1920. These are the freight rates to Port Arthur, Key Harbour, and from lake Erie to Quebec, Montreal and Fort William. I brought this in case it should be required for comparative purposes.

CANADIAN NATIONAL RAILWAYS

LAKE FREIGHT RATES FROM LAKE ERIE PORTS

Year	Port Arthur	Key Harbour	Quebec	Montreal	Fort William
1911.....	\$0 30	.....	.....	.....	.....
1912.....	0 30	\$0 60	\$1 07	.....	.....
1913.....	0 30	0 35	1 00	\$1 10	.....
			1 07	0 89	(From lake Erie ports)
1914.....	0 30	.....	1 00 (gross)	0 95	.....
1915.....	0 30	0 30	.....	.....	.....
1916.....	0 30	0 50	1 75 (gross)	1 50 (gross)	.....
1917.....	0 42½	0 50	2 23 (net)	2 01 (net)	0 42½
1918.....	0 48	0 75	3 00	2 70	0 48
1919.....	0 43	0 75	.....	.....	0 43
1920.....	0 50	0 65	.....	.....	0 50
		1 25			

The next statement I have is a statement showing by districts the coal consumed for the years 1918, 1919 and 1920. This shows for the year 1920 a total of 3,768,900 tons.

By Mr. Douglas (Cape Breton):

Q. How are those districts divided?—A. There are three districts. There is really the Intercolonial—the first district covers Bridgewater, Island, New Glasgow, Halifax, Moncton, Campbellton, Levis and Edmundston.

The next district includes Montreal, St. Maurice, Cochrane, Saguenay, Toronto, Ottawa, Nipissing, Superior. The next shows the various districts in Western Canada. I think that result gives you all the information you want.

Q. While you are on that, it may be proper at this time—

The CHAIRMAN: I think we had better have that statement included in the record first.

Mr. DOUGLAS: Very well.

WITNESS (Reading):

CANADIAN NATIONAL RAILWAYS—FUEL DEPARTMENT

STATEMENT OF STEAM COAL CONSUMED YEAR 1920

Division	Tons	District Total tons
Bridgewater.. . . .	39,200	
Island.. . . .	30,000	
New Glasgow.. . . .	164,800	
Halifax.. . . .	152,500	
Moncton.. . . .	341,000	
Campbellton.. . . .	137,300	
Levis.. . . .	222,000	
Edmundston.. . . .	101,000	1,187,800
Montreal.. . . .	111,000	
St. Maurice.. . . .	117,000	
Cochrane.. . . .	58,100	
Saguenay.. . . .	59,000	
Toronto.. . . .	92,400	
Ottawa.. . . .	125,600	
Nipissing.. . . .	71,800	634,900
Superior.. . . .	148,100	
Fort William.. . . .	211,700	
Rainy River.. . . .	103,300	
Manitoba.. . . .	120,500	
Winnipeg.. . . .	133,700	
Melville.. . . .	75,200	
Brandon.. . . .	163,000	
Dauphin.. . . .	26,000	
Regina.. . . .	216,000	
Saskatoon.. . . .	226,100	
Edmonton.. . . .	126,100	
Rigar.. . . .	118,900	
Calgary.. . . .	104,300	
Edson.. . . .	20,000	
Smithers.. . . .	103,500	1,896,400
Kamloops.. . . .		49,800
D. W. & P.. . . .		
Grand Totals.. . . .		3,768,900

By Mr. Douglas:

Q. Can you give the quantity of Nova Scotia coal as compared with American coal?—A. In the second district last year, the American coal was used entirely because we could not get any Nova Scotia coal.

By the Chairman:

Q. The second district is—A. We call that the second district; it is really north of the river in the province of Quebec, and then it goes up as far as Cochrane and Nipissing.

I do not think these statements have been called for—

Mr. KEEFER: It will do not harm for us to have them.

Mr. COWAN: I think they are very important.

Mr. DOUGLAS: The material is very valuable.

[Mr. R. C. Vaughan.]

The WITNESS: This shows a statement of coal furnished by the Nova Scotia mines. It shows our total contract for the period ended March 31, 1920, and the coal supplied on these contracts.

Q. That is the year 1920, or 1921?—A. 1921, I should have said.

By Mr. Ross:

Q. And the contract price?—A. No, I have not given any price. That is a question, while you are on it, I do not know whether you want me to furnish the prices of these various companies or not.

Mr. KEEFER: Do not want to pry into your private affairs, but we do want to know what the difficulties are in getting coal.

WITNESS: Later on I may make a general statement in that connection, but this matter ought to be useful, I think, as you go along.

The CHAIRMAN: Do you want this statement read?

Mr. COWAN: Take it as read, and we will read it in the record when we get the printed report.

The CHAIRMAN: It is somewhat lengthy.

Mr. DOUGLAS: Put it in the record.

STATEMENT OF COAL.

STATEMENT OF COAL FURNISHED BY NOVA SCOTIA MINES, MARCH 21ST TO 31ST, 1921, ALSO ISSUES AT POINTS SERVED BY THESE MINES FOR SAME PERIOD.

Company.	Weekly Order.	Supplied March 21-31, 1921.	Contract.	Supplied April 1-20, March 31-21.	Balance due on contract.	Issues at points served by Nova Scotia mines Station.	Tons.	Present Stock.
Gas d'Or Coal Co.....			30,000	33,727	-3,727	Halifax 1.....	1,904	31,047
						Dartmouth.....	255	600
						Stewarts.....	29	
Indian Cove Coal Co.....	810	1,664	40,000	30,982	9,018	Truro.....	1,163	6,521
Nova Scotia Steel—Rail	2,430	2,113	125,000	131,526		Stellarton.....	1,492	72
Nova Scotia Steel—				2,520	-9,046	Mulgrave.....	495	726
Water.....						Pt. Tupper.....	750	429
Dominion, Sydney—	1,400	2,260	150,000	77,829		Sydney.....	494	557
Rail.....						Nth. Sydney.....	25	10
Dominion, Sydney—		3,248	150,000	198,649	23,522	Pictou.....	223	43
Water.....								
Iverness Coal Co.....	1,000	1,456		4,488		Oxford Junction.....	94	112
				11,792		Springhill Junction.....	1,282	987
Ilford Coal Co.....			40,000	40,984	-984	Amherst.....	24	53
Greenwood Coal Co.....						Sackville.....	75	150
Port Hood Collieries.....		1,580	60,000	15,470	44,530	Cape Tormentine.....	386	166
Acadia Coal Co.....	3,600	2,329	173,208	178,556	-5,548	Moncton.....	3,982	69,517
						St. John.....	1,164	15,671
Intercolonial—Rail.....	2,800	6,282	125,000	96,499	7,370	South Devon.....	482	9,150
Intercolonial—Water.....						Centreville.....	104	66
Dominion, Springhill.....	1,000	3,900	100,000	111,177	-11,177	Newcastle.....	808	7,720
Paritime Coal Co.....	3,200	5,515	125,000	128,055	-3,055	Campbellton.....	1,850	24,392
Person Coal Co.....	350	33	10,000	9,266	734	St. Leonard.....	164	24
Imudie Coal Co.....	170	162	2,000	1,650	350	Edmundston.....	779	13,545
Bank Eng. Co.....			22,760	22,760		Napadogan.....	420	11,964
Anglo Coal Co.....			1,668	1,668		Dalhousie.....	41	35
Port Coal Co.....			6,079	6,079		Port Borden.....	101	944
Limney Corner Co.....			322	322		H. & S. Ry.....	448	2,439
Marsh Mine Co.....			1,000	508	491	Sundries.....	350	
						C. & G. S. Ry.....	141	270
						Char'town. (slack).....	155	253
Totals.....	16,760	30,542	1,173,729	1,125,63	986,015 -33,337		18,980	197,463

WITNESS: I think I am very nearly through with my statements. I have one statement here which will probably be of interest. These figures are approximate; I cannot say that they are entirely accurate, but this is a statement of the ordinary estimated coal requirements for the period from April 1st, 1921, to the 31st March, 1922.

[Mr. R. C. Vaughan.]

By the Chairman:

Q. Let us have it.—A. Yes. I would like to point out on this statement that we are figuring on taking nearly 700 tons of Nova Scotia coal more than we took last year, if we can get it at a price that is satisfactory.

By Mr. Cowan:

Q. "If you can get it." Are you having any trouble in getting it?—A. No, we can get the coal if we can agree upon the price.

By the Chairman:

Q. What are your figures?—A. I think myself, that this will probably be reduced a little, because we have a fairly good stock on hand, but this statement shows the ordinary approximate requirements for the year ended March 31st, 1922, for all districts, of 3,940,000 tons of coal.

By Mr. Ross:

Q. That is more than you used last year?—A. Yes, as I said, we probably would not get all that coal, but we put that down as the estimated figure, but there are a number of conditions entering into that coal supply that will have to be taken into consideration, and one is that the miners' agreement in the United States expires in 1922, and whether there will be a cessation of mining until a new wage schedule is arrived at, we do not know, but as Mr. Keefer knows, we have to provide for any eventuality of that kind.

By the Chairman:

Q. You have to be prepared for any emergency?—A. We are putting this figure down here, and we will get this coal if we can. The whole thing is divided up and it shows what proportion we hope to get from Nova Scotia, and what proportion from the United States.

Q. Can you give us that?—A. We hope to get from Nova Scotia approximately 1,600,000 tons of coal.

By Mr. Keefer:

Q. That is 700,000 more than last year?—A. Yes.

By Mr. Ross:

Q. Very nearly one half of your coal supply?—A. Yes, a large part of it. From the United States we are only figuring on getting this year about 1,100,000 tons.

By Mr. Keefer:

Q. That is about your requirements for the head of the lakes?—A. Yes. Well, it will hardly do that. We will supply the head of the lakes and Key Harbour with some of the water coal that we bring in through Cobourg by car ferry.

By Mr. Douglas (Cape Breton):

Q. Just to get these figures clearly in our minds, would you mind repeating them?
A. Our approximate figure for Nova Scotia coal, provided we can get it at a reasonable price, is 1,600,000 tons; United States coal, 1,030,000.

By the Chairman:

Q. And from the West?—A. From Vancouver island, approximately 30,000 tons of coal, then we have got the Crows Nest—no we will eliminate the Crows Nest, because we do not expect to get any coal from there—but in Northern Alberta, 1,250,000 tons of coal. We say "Northern Alberta," because there are a number of mines in Northern Alberta, on our line, producing a very good quality of steam coal.

[Mr. R. C. Vaughan.]

By Mr. Douglas (Cape Breton):

Q. You made the general statement that about 70 per cent of the coal used last year was Canadian coal. Can you give a general statement as to the proportion of Canadian coal that will likely be used this year—in your estimates?—A. Yes, we will use approximately 75 per cent, I would say, based on these figures, of Canadian coal.

By Mr. Cowan:

Q. Really, coming down to rock bottom, the only trouble you are experiencing in using Canadian coal is the price at which it will be delivered to you at the mine mouth?—A. Yes, that is a chief consideration. Of course, we would much prefer to use Canadian coal if we could get it at a price nearer the American price.

Q. I do not know how it is in Nova Scotia, but out in Alberta, they claim that one of the reasons why the price is so high is that the demand is quite seasonable and they have to handle the coal when they can get it. Have you attempted to make any long term contracts with any of these mines, and if you have tried, have you succeeded, and if you succeeded, would that enable them to keep working?—A. We have not made a long term contract, because we could not see that there was very much to be gained by doing that. These mines are located on our line of railroad, and the railroad takes the bulk of their tonnages, and we have always been able to negotiate a satisfactory price, and I think if we bought all of our tonnage from certain mines, it might retard the development of other mines, but the railway takes it in regular quantities, distributed so much a month—in regular quantities per month, per year—so the mines could not have any complaint of the way the railways take this coal. We do the same thing in Nova Scotia.

By Mr. Maharg:

Q. What are the names of the western mines, from which you get coal?—A. From the Mountain Park Coal Co., from the Cadomir Coal Co., from the Brazeau Collieries, and from the Blue Diamond Mine at Blue lake.

Q. That is known as the Blue Mine?—A. Yes, then they changed the name to the Blue Diamond.

By Mr. Cowan:

Q. They are in Northern Alberta?—A. In Northern Alberta. We get a little coal from the Crow's Nest district, to augment our supply from other collieries, but generally speaking we do not take coal from the Crow's Nest because we have to pay a freight rate to the C.P.R.

By the Chairman:

Q. Do you expect the amount required of Canadian coal this year will be larger than for previous years?—A. We have been figuring on using more western coal, I think, as that statement shows—than we did last year, but we cannot bring western coal economically very much further east than we have been doing.

By Mr. Cowan:

Q. What is the farthest east you bring the western coal?—A. We brought western coal down as far as Winnipeg, and it is really not economical for us to do that.

By the Chairman:

Q. Will the amount of western coal required be larger this year than it was last year, and will that increase the quantity of Canadian coal?—A. Nova Scotia will take care of the increased quantity.

Q. Why?—A. The reason for that is this: When we made our contracts last spring for coal to be delivered during the year 1920, and up to the 31st March, 1921, we had great difficulty in getting from the Nova Scotia mines sufficient coal to meet our

[Mr. R. C. Vaughan.]

requirements. They were shipping coal for export, and there was a good deal of demand locally. The result was that we had to buy American coal for use south of the river, at such places as Drummondville and Chaudière, and we used it down as far as Mont Joli and Rivière du Loup. We brought up Nova Scotia coal in some cases as far as Lévis by water, but we could not get sufficient. But, on the north side of the river, taking it in around Chicoutimi, and up to Ottawa, Cochrane and Montreal, and all in there, we used American coal because we could not get enough from Nova Scotia.

By Mr. Keefer:

Q. This question throws a little light on this subject of Nova Scotia coal and its usage. It is largely a question of price and of freight rate difference.—A. Yes.

Q. According to this statement? It is very striking.—A. Yes.

Q. You can freight from Lake Erie—or you could before the war—to the head of the lakes, at .30 a ton?—A. Yes.

Q. And at the same time, you were freighting to Montreal and Quebec, at \$1 to \$1.10 a ton from Port Hastings?—A. I think that is scored out.

Q. It is not, but I will score it out. Where was that from?—A. From Lake Erie ports.

Q. It is hauled in all cases from Lake Erie ports?—A. Yes.

Q. What would have been the rate by water from there to Quebec or Montreal? It is shown here.—A. No, because any coal which has been taken up to Montreal in the past has been taken by the coal company's own boats, and the coal sold at delivered prices.

Q. They would add their freight rate?—A. Yes.

Q. It would be interesting to know what freight rate they are putting into that price.—A. All I can say in that connection is that they asked us \$7 per ton at Sydney. That is for coal in our own boats.

By Mr. Cowan:

Q. In your own boats?—A. Yes.

Q. That is an awful price.—A. I do not want you to think that I am criticising the coal companies.

Mr. KEEFER: We are here, and we want some facts.

Mr. ROSS: I would like to hear you criticise them.

Mr. COWAN: This seems to me like a very vital point.

WITNESS: They are asking us \$7 per ton at Sydney for coal in our boats. They are asking us approximately, I think, \$8.10 at Montreal delivered on the cars.

By Mr. Keefer:

Q. That would be \$1.10 difference?—A. \$1.10, yes, but out of that you have to take your handling charge at Montreal, which is probably 45 cents a ton, so if you take 45 cents a ton—

Q. That makes it \$7.65?—A. That would be equivalent to \$7.65 alongside Montreal, and they are asking us \$7 a ton for coal in our own boats at Sydney.

By Mr. Cowan:

Q. What did you say the price was of the American coal at the pit mouth?—A. We can buy all the American coal of good quality at a price ranging from \$1.90 to \$3.

By Mr. Keefer:

Q. What is the freight rate to Lake Erie?—A. \$1.95 on the average.

Q. That gives us the cost of the coal at Lake Erie ports?—A. If you figure out the coal cost of American coal at, say, a maximum price of \$3 per ton at the mines, [Mr. R. C. Vaughan.]

and the rate on that particular coal to Lake Erie, including dumping in the vessels, as \$1.91½, that would make the price of the American coal, f.o.b. vessels Lake Erie, \$4.91½.

Q. And they are asking you, delivered in your own ships, at Sydney, \$7.—A. Yes.

Q. Why?—A. There can only be one of two reasons; either it is costing them too much to produce the coal, or they want too much profit.

By Mr. Cowan:

Q. We will have to find out the cost of production, because there is no use in trying to compete at that price.—A. I saw Mr. Wolvin in connection with these negotiations—

By Mr. Keefer:

Q. Who is Mr. Wolvin?—A. President of the Dominion Iron and Steel Co.

Q. Do they own these mines?—A. Yes.

Q. It is a sort of a merger down there?—A. Well, they seem to be together pretty well.

By Mr. Cowan:

Q. Have you noticed any particular difference in the cost of this coal since this new merger took charge of it?—A. All I can say about the Nova Scotia coal is this: that every Nova Scotian mine is asking us a higher price than we paid last year, while the American mines have asked us much less.

Q. The quality of the coal is better than in Nova Scotia?—A. Yes.

By Mr. Maharg:

Q. How do the prices compare with last year?—A. The prices of Nova Scotia coal this year are very much higher than they have been at any time.

By Mr. Keefer:

Q. You have given us a contrast between the coal in the vessels at Lake Erie, and the prices demanded in your vessels at Sydney. What is the percentage of efficiency of the coal from the States over that of Nova Scotia?—A. The coal supplied by the Dominion Coal Company is good coal.

Q. There is nothing then in the question of quality?—A. I do not think that question needs to be discussed very much.

Q. Does that price which you figure on, delivered at Lake Erie include the duty?—A. No.

Q. Let us have the duty. Let us get this thing all straight.

Mr. COWAN: Yes, but there is a difference there of three or four dollars a ton without the duty.

WITNESS: I might give you approximately the prices at Port Arthur. I am taking a rough figure of \$3 a ton for three-quarter screened mine; it may be a little less than that—you add a freight rate of \$1.95 and add 50 cents freight rate from there to Port Arthur—

By Mr. Keefer:

Q. That is pretty high?—A. Yes, but I am taking the maximums, and you pay 53 cents—all the companies were paying 50 cents last year (that was established by the Pittsburgh Steamship Co.)—and you add 53 cents as duty, and that makes the cost alongside Port Arthur \$5.98 plus the exchange—we will say, 80 cents, for argument's sake—that is the exchange on the freight rate—

By Mr. Keefer:

Q. And that has been transported about 1,000 miles?—A. Yes. That would make the price alongside the dock at Port Arthur, including duty, exchange, and all charges of approximately \$6.75, against \$7 which we are asked to pay at Sydney in the boats.

[Mr. R. C. Vaughan.]

Q. What difference are they asking between coal in your boats and cars?—A. Approximately 50 cents a ton. They say they will give us coal, f.o.b. cars, for \$6.50, for use on the railways there, but if we take coal in our own boats—

Q. When you say "our own boats" what do you mean?—A. The Canadian Government Merchant Marine.

Q. They are discriminating against these boats, but how much?—A. Fifty cents a ton.

By the Chairman:

Q. Is there any reason for that?—A. The only reason in my mind is that as everyone knows there is a very considerable supply of vessel tonnage at this time, and they want to use that.

Q. Is there any increase in cost between delivering to the boats, and to the cars?—A. No.

By Mr. Douglas (Cape Breton):

Q. Only the additional trimming?—A. Yes. It may be twenty or twenty-five cents a ton, depending upon the style of the boat, or the nature of the bunkers.

By Mr. Keefer:

Q. Are there any other mines you could purchase from?—A. I think in Nova Scotia, the mines keep together. I think they will stick pretty much by the big mine prices, such as the Dominion and the Nova Scotia. We asked the smaller mines for quotations, and they say: "We will give you so much," and we say: "What is the price?" and they say "Well, it is based on the Dominion or the Nova Scotia price, and we will give you a quotation from that."

Q. Do you know of the Joggins mine?—A. Yes.

Q. And the Springhill?—A. Yes.

Q. Are they in this combination—if you may call it that?—A. No. The Joggins is not, but the Springhill is. The Nova Scotia and the Dominion Coal, which are both in the merger, are really the only ones which have dockage facilities for handling large quantities. Of course, the International has one at Port Hastings.

By Mr. Cowan:

Q. There is no evidence of competition as between the different mines?—A. Very little.

By Mr. Keefer:

Q. Do they ship the Springhill coal from Parrsboro?—A. There is none shipped up here from Parrsboro.

Q. It could be done?—A. They would have to put up some handling facilities.

Q. Outside of that, is it feasible?—A. I do not know much about the local conditions there.

By Mr. Ross:

Q. What is your mode of buying? Do you ask for tenders, or how do you do it?—A. We ask for prices; for instance in Nova Scotia coal, when it comes along towards February some time we will send inquiries to all the Nova Scotia mines asking them what kind of coal they can give us and what the price is.

Q. You do not advertise very much? That is, you do not say that the C.N.R. wants coal or anything like that?—A. No, we do not do that because we know what mines are in a position to supply us with coal.

By Mr. Cowan:

Q. You have no such trouble in connection with the western mines as you find in the eastern mines?—A. We have very little trouble with the western mines.
[Mr. R. C. Vaughan.]

Of course, we always do negotiate a little in respect to price naturally, but the price of western coal did not advance to the extent of the Nova Scotia coal.

By Mr. Keefer:

Q. Is the situation this, that at the present time, they are asking this price in excess of the price asked for coal delivered at Port Arthur?—A. The price quoted to-day is \$7 delivered in our boats.

Q. I see by the newspapers that the mines down there are shutting down?—A. Yes.

Q. Then it is not for lack of business?—A. We have offered to take up the river approximately 600,000 tons of coal if we can come to a price.

Q. So, in plain English, it is because of the fact of the coal companies' standing out for what you consider a high price—that is the reason for their shutting down to-day?—A. We can place contracts if we can get the price.

Q. Will you please answer my question. The reason for the mines shutting down is not for lack of business, but owing to the fact that the companies are holding out for a higher price than you think is reasonable to pay, and consequently the miners are without employment?—A. Yes, that is right.

Q. We want to get at the facts. We do not want to mince matters at all. You say you consider the price too high and that is one of the reasons?—A. Yes, that is one of the reasons. We do consider the price too high.

Q. You have contrasted that with what you can get it for elsewhere?—A. Yes,

By the Chairman:

Q. You cannot take the 600,000 tons up the St. Lawrence at as good a rate as the American coal can be brought in and sold in the different districts?—A. There is a question there. It costs us more to bring that American coal to Montreal.

By Mr. Keefer:

Q. Let us follow that up. Here are your freight rates from lake Erie to Montreal. Let us see what we can get it to Montreal for. You have delivered coal by water at anywhere from 89 cents to \$1, or up as high—I see in 1918 you paid \$2.70?—A. Yes, but I think that was for just one cargo.

Q. What is the freight rate by water?—A. From lake Erie to Montreal would be approximately \$2.25, and from lake Erie to Quebec, \$2.50.

Q. Why is that four times the rate to Port Arthur? Is it on account of the size of the ship?—A. Yes. They can only carry small cargoes. They have to go through the canals as you know.

Q. We want facts on that point. Montreal would benefit in its price of coal if a large ship could come down with that coal?—A. Undoubtedly.

Q. By how much per ton?—A. Of course, if the large ships could go down—

Q. Take a five hundred-footer, the kind that takes your coal to the head of the lakes—how much does it carry?—A. From eight to ten thousand tons.

Q. And vessels that can come to Montreal can carry how much?—A. From twelve to fifteen hundred tons. There may be occasionally a boat that can carry two thousand tons.

Q. In other words it would take four or five ships to bring to Montreal the same quantity of coal that you could take to the head of the lakes in one ship?—A. Yes.

Q. And that is due to the lack of canal facilities?—A. Yes.

Q. And the difference in cost is, therefore, \$1.75, 50 cents to Port Arthur and \$2.25 to Montreal?—A. Yes.

Q. That difference is how much?—A. \$1.75.

Q. Then Montreal is paying through the nose for all its coal?—A. They are paying that much more for any water coal they get.

Q. Now, the freight rate from Nova Scotia up to Montreal to-day, is how much?

[Mr. R. C. Vaughan.]

Mr. DOUGLAS (Cape Breton): Is that rail?

Mr. KEEFER: No, water.

WITNESS: All I can say about that is that there is no going rate—

By Mr. Keefer:

Q. Prior to the war, so I am told, or before vessels carrying coal, like the *Storstad* and vessels of that kind, were bringing coal up, the price was 90 cents a ton?—A. Yes.

Q. That was a high rate?—A. Yes.

Q. Due to the lack of return cargoes?—A. Yes.

The CHAIRMAN: May I make a suggestion? Mr. Vaughan understands a lot of things which we require, and I would suggest that we give him an opportunity to make a statement on them. Perhaps he can make a statement which will cover most of these points.

Mr. KEEFER: No, I do not agree with you, Mr. Chairman. We will get the facts better by questioning.

The WITNESS: I think all of my statements have been taken away from me. I cannot say very much more about existing conditions, except that it is our policy to use as much Canadian coal as we can. Up to the time of the war, I believe, the Inter-colonial railway was using entirely coal from Nova Scotia on its lines. During the last couple of years, due to its inability to get Nova Scotia coal, they have been compelled to rail American coal, in some cases down as far as Campbellton, New Brunswick, and we have carried Nova Scotia coal south of the river, and up as far as Hearst, on the Transcontinental, and it is our contention that the Nova Scotia collieries should not base their coal delivered at Montreal on a few cents less than the American coal, but on the cost plus a reasonable profit.

By Mr. Keefer:

Q. Plus reasonable freight?—A. Yes.

By Mr. Ross:

Q. I want to follow up a question asked you by Mr. Keefer. You say it would take four vessels to carry the coal from lake Erie ports to Montreal, that one vessel will carry from a lake Erie port to Port Arthur?—A. Yes.

Q. And the difference in the rate is \$1.75 per ton?—A. Yes.

Q. Does anything else enter into the difference?—A. Yes. The boats going from ports on lake Erie to Port Arthur and Fort William can always get ore and grain down the lakes again, while some of the boats coming to Montreal are not always able to get a return cargo. Some of them do go down the river and get pulpwood, but many of them come back light, and all that enters into the freight rate.

By Mr. Keefer:

Q. If the coal could be carried in a large ship through the canals, so you can take an eight thousand ton cargo—You get a return cargo from the head of the lakes of wheat?—A. Yes.

Q. Which you did not get from Montreal?—A. No, those boats go back light.

Q. If you could, it would cheapen the coal from Nova Scotia, like it does the American coal at the head of the lakes?—A. Yes, if the cost of producing Nova Scotia coal was not too high.

Q. And the same boat would bring the wheat out cheaper?—A. Yes.

Q. How much cheaper? I will show you—A. It will be a good deal cheaper.

Mr. KEEFER: I know this is not coal, but we want the facts here.

The CHAIRMAN: It seems to me that unless Mr. Vaughan has some accurate knowledge of what the cost would be, and what the situation would be, after the canals are deepened, it would be rather futile questioning him.

[Mr. R. C. Vaughan.]

Mr. KEEFER: No, Mr. Vaughan is one of the prominent officials—

The CHAIRMAN: If he has the knowledge, of course, it will be quite proper to question him.

Mr. KEEFER: I am quite satisfied that he has the knowledge, if we will give him a chance to tell us.

WITNESS: I think I can answer most of the questions.

By Mr. Keefer:

Q. You know the wheat rate by water is about four cents?—A. Yes.

Q. And from the head of the lakes to Montreal is how much?—A. I cannot answer that.

Q. Eleven or twelve cents?—A. Yes, a great deal higher.

Q. And the same principle operates as regards those four ships and the one ship?—A. Yes.

Q. They have to discharge at Port Colborne from one ship and load into four ships—the cargo that was formerly in one?—A. Yes.

Q. If the same big ship could go to Montreal, that city would get that rate down?—A. Yes.

Q. Julius Burnes pointed out there is a saving of five cents?—A. Yes.

Q. If a big ship could get to Port Colborne for four cents, it surely could go on down to Montreal for two cents more.—A. Yes.

Q. That would make a saving of five cents?—A. Yes.

Q. So there would be a saving on wheat, and a saving on ore, as well as a saving on coal?—A. Yes. I am not speaking now in the interests of the railways.

Q. I will take you up on that. I am glad you spoke of that. "In the interests of the railways": You never would attempt to haul coal or any other merchandise by rail from the head of the lakes to Montreal, or vice versa, when the water is open, if you could handle it by water?—A. No, the natural channel is by water. It can be handled cheaper.

Q. So, during the water season, there is no interference in the railway's business?—A. Practically none, because all the grain goes by water anyway.

Q. On that point—if you will allow me to digress a moment—if you can reduce the water rates, more business will move? There is something that will come out that has not come out as yet?—A. Most likely.

Q. You will get the carrying of that to the head of the lakes?—A. Yes.

Q. You are not getting it to-day?—A. No.

Q. You are not losing anything?—A. No, we are getting all there is.

Q. We will now see you can get some more business?—A. Yes.

Q. How can it hurt your railways? It cannot hurt it. The American railways have come out flat-footed and have said it did not hurt them.—A. I have not gone into that in detail, but if we were able to get all this grain out in the summer, there would not be much to haul in the winter time.

Q. You know you cannot do it all in the summer.—A. No.

By Mr. Cowan:

Q. Mr. Vaughan, I do not want you to divulge anything of a confidential nature, or anything which might be of injury to your railway, but there is one point I would like cleared up. You say the Dominion Coal Company wanted \$7 per ton?—A. Yes.

Q. Is there any substantial difference between your offer to them, and their demand? You may be willing to say how much you were prepared to offer?—A. We have not made any offer, to them at all. They refused to reduce the price and I told them we could not buy any coal at any such price as they quoted, and we must have a substantial reduction in the price of coal, before we could close a contract with them.

[Mr. R. C. Vaughan.]

Q. Did they give you any reason?—A. You can get from them the cost of production; the only excuse they gave was the increased cost of production.

By Mr. Ross:

Q. Are there not any smaller companies with which you can deal?—A. Yes.

Q. Why do you not do it?—A. We do. We buy coal from practically all the companies down there who have coal suitable for use by the railways. I am reading from this statement (indicating) the companies from whom we buy coal, from the Bras D'or Coal Company, 30,000 tons, from the Indian Cove, 40,000, and various smaller amounts from these other companies. We would have bought more but they could not give it to us.

Q. Why can you not get more from these independent companies? Is the output limited?—A. They are not in a position to ship by water, and it is too expensive to move it all by rail.

Q. It is the cost of handling coal?—A. Yes, most of them are located in the interior and have limited shipping facilities.

Q. Are there not any independent coal companies which are so located as to be able to compete with these larger companies which seem to form a combination?—A. I do not think so; especially those with a suitable quality of coal.

We keep in touch with them and they with us, every year, and we know the production from every mine of all those who want to sell to us, just what they can do, and we enquire from anybody who produces coal as to what they can do, but there is a great deal of coal down there which cannot be used economically by the railroads.

By Mr. Cowan:

Q. Would it not be a profitable thing for your company in view of this difficulty of being "held up" to the extent of a vast amount of money—would it not be profitable for your company to buy up one of these coal mines and operate it yourselves?—A. That goes into the question of the Canadian National Railways operating coal mines.

Q. Some of the railway companies do it. The C. P. R. does it?—A. I think the C. P. R. have a working arrangement, and have had for years, with the Ellsworth Collieries, but whether they have a financial interest in these collieries, I do not know. The Grand Trunk own their own mines.

MR. COWAN: I would be hanged if I would be held up in the way that you seem to be now.

By Mr. Douglas (Cape Breton):

Q. Let us try to make those figures a little clearer. You say the Dominion Coal has asked \$7 a ton for coal on board the Canadian Government ships at Sydney?—A. Yes.

Q. Whereas the railway's attitude is to pay the same price as it would pay for rail coal at Sydney?—A. Yes. Our contention is this, that they should sell coal to us at Sydney in our vessels, at the same price they would sell the railway, plus any trimming charges, but they make a differential of fifty cents because they want to force us to use their boats.

Q. So, when you say that no offer was made by the railway to the companies in Nova Scotia, you mean no offer was made as to price, but as to quantity?—A. We offered them specific quantities of coal; for instance, we have offered to take 600,000 tons up the river from Nova Scotia, and the Dominion. We have offered to take 150,000 tons at Sydney by rail, and have offered to take 150,000 tons at Springhill—which is the Dominion coal.

By the Chairman:

Q. Does that cover all the coal you can economically use of Nova Scotian production?—A. No, we also will buy a good deal of coal from a number of these smaller companies.

[Mr. R. C. Vaughan.]

Q. Would that production cover the amount of territory that will be served by you?—A. In addition to what we get from the smaller mines, we buy some from the Maritime Greenwood and Intercolonial, which are down there.

Q. What I wanted to know was this; is the amount which you are willing to purchase from the Nova Scotian mines sufficient to meet your requirements in the territory that can well be served by the Nova Scotian coal, taking into consideration the transportation difficulties?—A. Yes. In figuring on this tonnage, we figured that we would move it west as far as Hearst and Cochrane.

By Mr. Keefer:

Q. The independent mines there then, other than the mines which are demanding an excessive price.—A. They are all demanding approximately the same price.

Q. Then that is the coal situation?—A. Yes. Of course the mines that produce 40,000 tons of coal are operated as economically in proportion as the mine which produces 3,000,000.

By the Chairman:

Q. There is territory which the Nova Scotia coal producers can control, as far as their coal can be used on your system?—A. Yes.

Q. And which they are depriving themselves of supplying by asking an excessive price?—A. Yes, by asking a price which we think is excessive. You gentlemen can determine, after investigation, whether it is excessive or not.

By Mr. Douglas (Cape Breton):

Q. I think this was brought out before—but I would like to ask on this question: You say that your company is prepared to move 600,000 tons of coal from Cape Breton up the St. Lawrence, and your intention is to utilize the Nova Scotia coal in territory where Nova Scotia coal was never before used?—A. That is correct.

Q. What points are they?—A. It would be practically all of the Canadian Northern in the province of Quebec. We would bring that coal into Montreal and use it at Longue Pointe, and Joliette, and Garneau Junction, and Shawinigan, but we have been compelled to take American coal before this into points like Chicoutimi and use it in the lake St. John district, and bring it out west on the Transcontinental from Quebec as far as Cochrane and Hearst.

By Mr. Maharg:

Q. Mr. Vaughan, if you could get the Sydney coal at the same price as the American coal you could put that coal into Port Arthur, or lake Erie ports at practically the same price, as the American coal? In other words, it would compete clear up to the head of the lakes?—A. It would, or nearly so.

Q. Would it not altogether? I have been trying to follow the different freight rates, the rate to Montreal and other lake ports.—A. Yes, if we could give it a continuous movement up to the head of the lakes.

The only reason it does not compete is on account of the price. I do not think, of course, that Nova Scotian coal can be produced quite as cheap as American coal, but if the present selling price is the lowest they can give us, based on the cost, it seems to me there should be something done to cut the cost down.

By the Chairman:

Q. They cannot get this market waiting for Nova Scotian coal?—A. No.

By Mr. Keefer:

Q. Have you any figures of what you can get coal for from Great Britain?—A. I cannot say. The price last year was exceedingly high, and I understand this year, it is still pretty high.

[Mr. R. C. Vaughan.]

Q. What is the normal situation there?—A. Before the war, coal was cheaper there than it is here.

Q. How much?—A. I cannot say offhand.

Q. You could bring out the English coal cheaper than you could get the Nova Scotia coal?—A. I cannot say that. All that I know is that they were in the habit of bringing over Cardiff coal to Quebec.

The CHAIRMAN: Are there any other questions to ask Mr. Vaughan?

MR. COWAN: I have got the information I want. It is quite evident to me that the whole trouble is in the mines in Nova Scotia, and we have got to get to Nova Scotia to find out why the cost is so high.

By Mr. Douglas (Cape Breton):

Q. As the result of the recent merger of coal companies, the Springhill has come in with the Dominion, and now the Nova Scotia Steel is part of the merger,—I understand also the Acadia Coal Company is part of it?—A. I understand so. I understand the merger controls all the big mines down there.

Q. Can you tell from your statement there what proportion of the coal you got last year from the merged companies, and that secured from what we will call the smaller independent companies?—A. I can tell you fairly well. I believe last year, we got over 60 per cent from the companies that are now included in the merger, but we did not get anything like the coal from them last year that we wanted.

By Mr. Cowan:

Q. You did not get all the coal you wanted?—A. No, sir.

Q. For the same reason?—A. Well, the coal companies had made some export contracts. When we were negotiating for coal we found we could not buy coal from them anything like the American price and I think they preferred the export market, because they could get more money for it.

By Mr. Keefer:

Q. I was going to ask you about that, but I thought Mr. Ross would do it. What was the export price?—A. They had various prices. I know that for bunker coal they got as high as \$14 a ton.

By Mr. Cowan:

Q. Yes, I remember that.—A. They charged the Canadian Merchant Marine in some cases with it, but we adjusted it down to a little over \$12.

By Mr. Keefer:

Q. That is for bunker coal?—A. Yes. And the highest price we ever paid on Vancouver Island for our Pacific boats was \$8.60.

By Mr. Cowan:

Q. Is there any difference between the cost of mining in the east and the west?

MR. KEEFER: Is is a question of supply and demand.

WITNESS: There is more demand. The Nova Scotia collieries are situated more advantageously for shipping to France and Holland.

By Mr. Cowan:

Q. Then it ought to be cheaper on that account?—A. Yes. For instance, they can ship from Vancouver to Scandinavia, around through Panama.

By Mr. Keefer:

Q. And also to Mediterranean ports?—A. Yes. They will buy wherever they can get it.

[Mr. R. C. Vaughan.]

Q. You say you are pretty well fixed for coal, and things ought to be normal again?—A. Yes, things ought to be normal again.

Q. Just on that point, there is one further question which might be illuminating. What would you deliver your Vancouver coal around to the Atlantic seaboard for?—A. I could figure that out, but I could not say offhand.

By Mr. Cowan:

Q. Just coming back to a statement you made at the beginning of your evidence, before Mr. Keefer came in. You said that it cost you \$7 a ton to deliver your own coal from Alberta to Port Arthur. Do you give yourself a lower rate than you would give to the consuming public, or the ordinary dealer?—A. In figuring out our cost of haulage, we figure out our cost—

By Mr. Keefer:

Q. What is the cost per ton per mile?—A. .7 cents per ton per mile is the actual cost, but that does not take into consideration any overhead. It is merely the cost of the actual running of the train.

By Mr. Cowan:

Q. If you carried it for the ordinary dealer you would lose money?—A. Yes.

By Mr. Keefer:

Q. Is it reasonable to state that you could not haul coal and not lose money at less than one cent per ton per mile?—A. I do not think we could.

Q. There is coal being brought down to Port Arthur from the east, and sold. I had a letter from a dealer up there who says that your company is handling it and glad to handle it, but they make this complaint, Mr. Vaughan, that the rates down for that coal are greater than the rates west for lumber.—A. I cannot say very much offhand about that.

Q. I can understand that, on account of the immense quantity of wheat coming down, the cars can go back loaded, and they might be able to get a better rate back than this way, on account of the congestion of empty cars.—A. I have not got this western rate in my head, but now that you speak of that I am—

By the Chairman:

Q. Are you prepared to give the Committee any information on the transportation of coal to the consumer? We have been dealing with the Canadian National system so far largely as a consumer of coal, but we want some information regarding the transportation?—A. I do not know that I can say offhand. There is so much enters into these freight rates that I think it is better to get a traffic representative from the various railways to speak on that subject, because there are so many things entering into the rates.

By Mr. Keefer:

Q. How far west do you take the Grand Trunk Pacific coal?—A. The American coal?

Q. Yes?—A. We took very little of it last year west of Winnipeg.

Q. You took it to one divisional point west of Winnipeg?—A. Yes, we have done that, and we may do it again, but as I said before, we are making it a point to use as much of the Canadian coal as we can.

By Mr. Cowan:

Q. Have you any evidence of this Dominion Coal Company trying to force the smaller companies to operate through them?—A. No, I cannot say that I have.

Q. Would you expect that, if you dealt exclusively with the Dominion Coal Company, it would have the effect of drawing the smaller companies in, while if you

[Mr. R. C. Vaughan.]

dealt with the smaller companies, it would enable them to continue as they are as independent companies, and thus save you from further mergers?—A. We have always done that; we have always encouraged the smaller coal companies, and this (indicating) is a list of the smaller companies from whom we purchased coal last year.

By Mr. Keefer:

Q. How many of them are there?—A. Nineteen different mines last year.

By Mr. Douglas (Cape Breton):

Q. But leaving out the merged companies?—A. If we leave out the merged companies, it would be practically fifteen.

By Mr. Keefer:

Q. Is it worth while asking you anything about New Brunswick coal?—A. Well, we have not gone in for New Brunswick coal very much, because it is not situated on the line of the Canadian National Railways, and we have no spur trackage in there.

Q. Do you happen to know anything about the possibilities of getting coal from New Brunswick?—A. At times we have taken a little coal because there are certain points on the Transcontinental where the freight rate is low.

Q. Have they any coal which can be shipped by water?—A. I do not think they have very good water facilities, but I understand they have railed coal into Montreal.

By Mr. Cowan:

Q. Has the Natural Resource Development Bureau made any investigation into reporting on the coal areas up in the Calgary country?—A. I know that our superintendent was up there and made inquiries, but I have not heard what he discovered. I do not think anything definite has come out of that.

By Mr. Douglas (Cape Breton):

Q. As I understand it, the policy of the railways is to take the maximum of coal in, what you call this district No. 2 of the railway—the maximum amount of Canadian coal?—A. Yes, we want to use Canadian coal for both north and south of the St. Lawrence, if we can.

Q. In regard to the Grand Trunk: Who purchases the coal for them?—A. It is done by the Grand Trunk officials; we have nothing whatever to do with that. Mr. Kay is their general purchasing agent, and he looks after that.

By Mr. Keefer:

Q. Do you know in what points in Ontario they take coal by water?—A. Most all the coal going into Ontario would come by way of Cobourg. They have joint interests there in the car ferry with the B.R. & T. Railway. They may take in some at Prescott from the lake Ontario ports.

By Mr. Maharg:

Q. Have you had any trouble with the western mines with regard to prices?—A. No, we are now negotiating with them. We have not had any serious difficulties about that. We have not got down to placing our contracts this year, due to the fact that we have a pretty fair supply of coal on hand at the present time.

Q. Have you received prices from them?—A. We have received some. They average about \$1 a ton less than the Nova Scotia coal.

Q. That means about \$6 a ton for the western coal?—A. When I said "\$7" I was referring to coal delivered in our boats. The price of the Nova Scotia coal for delivery in the cars and by rail is \$6.50. Prices out West run from \$5 to \$5.50 for good coal.

Q. You have bought more or less from these four mines that you mentioned?—A. Yes.

[Mr. R. C. Vaughan.]

Q. In what proportion—about equal quantities?—A. We bought some coal from the Blue Diamond, and some from the Brazeau because we have been buying coal for a long time, and because we could not buy any place else during the war. We have been buying coal from Cold Spring, on the Grand Trunk Pacific, and such places as Yellowhead, Blackstone, Olivant, which coal is much cheaper; it runs about \$3.50, but it sparks a little, and is not as good as the better grade.

By Mr. Keefer:

Q. Can you give us any information about the anthracite situation in the West?—A. I do not know very much about it, because we use so little anthracite coal ourselves.

Q. While you are here: Have your transportation departments, and your power departments ever considered the advisability of electrifying your road—using the white coal?—A. I do not think they have very seriously, no.

Q. Do you personally pretend to know anything about it?—A. No, I have not given it much thought. Of course, it would be a tremendous expense to convert the line, and it is something we have not given very serious consideration to.

By Mr. Douglas (Cape Breton):

Q. Mr. Vaughan, we were talking some time ago about the long term contract with mines?—A. Yes.

Q. Has the railway any long term contracts with American mines?—A. There is only one contract, which runs for two years after this year, and practically provides for all the coal we are to have delivered at the head of the lakes—at Port Arthur.

Q. Is that an extensive contract?—A. It is. There is a little leeway in it; I think it runs from 800,000 to 1,000,000 tons per year.

Q. That is an American contract?—A. Yes, but none of that comes east of Toronto at all.

Q. It all goes to Port Arthur?—A. Yes, Port Arthur, Key Harbour, and Duluth.

Q. Have you any in Canada?—A. We have a contract with the Nova Scotia Steel and Coal Co., which runs for one more year after this year.

Q. What is the tonnage of that?—A. That provides for 200,000 tons.

Q. Per year?—A. Yes.

By Mr. Keefer:

Q. On the question of handling your coal at the head of the lakes—you handle some at Fort William?—A. Yes.

Q. Over what?—A. The Fort William Coal Company's dock.

Q. Where is that?—A. It is called the Paisley dock.

Q. And the rest?—A. Over our own docks—the Canadian Northern.

By Mr. Douglas (Cape Breton):

Q. In regard to that contract with the Nova Scotia Steel and Coal Co., that is the only long term contract, so-called, with any Canadian company—the Nova Scotia Steel is now part of the merger?—A. Yes.

Q. And I think you stated that the intention was to take 600,000 tons of waterborne coal from the Dominion Coal and the Nova Scotia Steel Company, and about 50,000 tons from Springhill—that is the same company?—A. Yes.

Q. And 150,000 from the Dominion on the rails at Sydney?—A. Yes.

Q. As well as this 200,000 tons?—A. Yes.

Q. What is the total requirement of the railways for Nova Scotia coal as appears by your estimate for this season?—A. The total requirements for Nova Scotia coal are approximately 1,650,000 tons.

By Mr. Ross:

Q. So you are getting 1,100,000 from these merger companies?—A. Yes, we offered to buy it from them, provided we could agree upon the price.

[Mr. R. C. Vaughan.]

By Mr. Douglas (Cape Breton):

Q. And the Acadia?—A. Yes. From the Acadia, we have been figuring on 125,000 to 150,000. We have been getting that right along.

Q. So the proportion you are getting from the merger would be very high?—A. Yes, but it will have to be borne in mind, of course, that they are the only ones who own the facilities to ship by water.

Q. With the exception of Inverness?—A. Yes, but the Inverness coal is very high in sulphur, and it disintegrates very quickly.

By Mr. Keefer:

Q. Which is that?—A. The Inverness.

Q. Is that applicable only to that mine?—A. It is applicable to various mines in that seam, but the Inverness coal is not a good stocking coal, and it is liable to ignite.

Q. What proportion of that do you use?—A. Of the Inverness coal?

Q. Of that type of coal? That coal which disintegrates if exposed?—A. There are a number of coals which will do that.

Q. What is the proportion? Would 50 per cent cover it?—A. Not quite that much, but 40 or 50 per cent of the smaller mines do not produce coal that is good for steam purposes.

By Mr. Douglas (Cape Breton):

Q. Mr. Vaughan, you were giving particulars in regard to the negotiations with the Dominion Coal Company for coal this year, to be taken by water?—A. Yes.

Q. And I think I understood you to say that negotiations had commenced with the president of the Dominion Coal Company in March last?—A. Yes.

Q. And I suppose your negotiations are contained in correspondence which the Committee might have at a later time, if it desired?—A. I think so. If you will request our president for the correspondence, I have no doubt he would give it consideration. I would not feel that I was authorized to divulge the correspondence of the company.

Q. The reason I ask this is that, from the newspapers, there seems to be a tendency to contradict that statement, and I suppose the correspondence would be available from railroad sources, if necessary?—A. Yes, sir. I can tell you when I first had this matter up. It was on March 2, in Montreal, and on March 7, I wrote a letter to the Dominion Coal Company offering them the tonnage of which I have spoken, and I wrote them on March 16, asking them to reply to my letter of March 7. We got a reply on March 18, in a sort of a way, telling us—of course I should point out that we are reserving the right to carry our own coal in our own boats, something to which I think we are entitled.

By Mr. Maharg:

Q. But they penalize you fifty cents per ton for doing it?—A. Yes.

By Mr. Cowan:

Q. Why should they be permitted to hold up anybody who wants to carry coal in their own boats?

Mr. KEEFER: Because we have been asleep.

Mr. COWAN: They may have been asleep in Nova Scotia, but the rest of Canada has not been. I do not think any company has any right at all to hold up any other company, if that company prefers to buy at the wharves—I think they have no right to stick their fleet of ships into it.

Mr. KEEFER: That is a matter of argument.

Mr. COWAN: I am ready to argue that right now.

Mr. KEEFER: I will admit that you are quite right, but let us get all of the facts first.

[Mr. R. C. Vaughan.]

By Mr. Maharg:

Q. You had a sheet here with the different quantities of coal in Nova Scotia. Have you a similar sheet for the different mines in the West?—A. I would not be sure of that now. I do not think I have.

Q. You could furnish that to us?—A. Oh, yes.

By Mr. Ross:

Q. In answer to their asking \$7 per ton on your boats, in Nova Scotia, did you make any counter-proposition offering so much?—A. No, we did not, we were too far apart.

Q. You must have made some proposal if you were far apart?—A. I was discussing the matter with Mr. Wolvin, and we told him that we thought he ought not to expect to sell his coal to us at a profit of \$1 or \$1.50 a ton, and in this correspondence (indicating)—this is the gist of what came up later—he said:—

“We feel that the price of the Dominion coal should be substantially lower than that of any other company in Nova Scotia, for the reason that you have a much larger production and are able to produce cheaper. The price of American coal is now running from \$2.25 to \$3 per ton at the mines and in view of existing features”—

where I had reference, of course, to the export conditions—

“We feel that the Dominion Coal Company should be able to give us an attractive figure on coal.”

Then I went on to say:—

“Most of the United States companies work on a margin of from 15 to 25 cents profit—I think the average profit obtained by them would run about 25 cents per ton—however, you know the cost of producing your coal, and what is a reasonable profit to add to it, but we feel that you should not ask us to pay anything beyond that. We assume, of course, that any contract entered into will be based on the cost of producing coal.”

That is, should there be a reduction in labour, or supply, our prices should be reduced proportionately, and when we gave them the tonnage we could take from them, we thought we should get a little better price.

Then they came along on March 24, with this proposition of \$7 per ton, and I wrote them at that time:

“I have your letter of March 24th, in regard to our coal requirements, and regret to have to advise you that we are unable to entertain any of the propositions submitted by you.

“We feel disappointed that you have not seen fit to make what we think is a reasonable price. We hope you will see the gravity of the situation, and will see fit to amend your prices very considerably.”

That was on the 31st March, that is where it ends.

The CHAIRMAN: Are there any other questions to ask Mr. Vaughan?

WITNESS: I would like to point out that I do not want to appear in the light of criticising the coal companies.

Mr. COWAN: We have asked you questions, and expect you to answer.

WITNESS: I am giving you the facts as you bring them out. We feel that because they are located on our lines, and are only served by our railways, that they should give some preference to the best customer they have. Last year, when the car supply was about 30 per cent of the requirements of the mines of the United States,

[Mr. R. C. Vaughan.]

the car supply for coal for Nova Scotia was about 90 per cent so that none of the collieries suffered to any appreciable extent due to the want of cars.

Mr. ROSS: Personally, as a member of this Committee, I cannot see why this Committee should not ask Mr. Vaughan to give his criticisms fairly and frankly. That is what we are here for.

Mr. COWAN: He has given us the facts—that is all we want.

Mr. ROSS: The witness is an expert—

Mr. DOUGLAS (Cape Breton): We want the facts without any animus.

Mr. KEEFER: If your data is contradicted, we may need that correspondence, especially upon the examination of the coal people, because we want to get at the bottom of this thing.

By Mr. Douglas (Cape Breton):

Q. I was going to ask Mr. Vaughan regarding the discharging facilities that the railway has. Are they adequate for railway purposes?—A. We have a plant at Sydney, through which we figure we can take in 300,000 tons of coal by working a double shift, and the coal companies themselves have a plant located at Quebec, and one at Montreal, which are adjacent to our lines by switching over the Harbour Commissioners tracks, so that their plants would serve any requirements we might need in the way of handling facilities. There are adequate facilities at Lévis, Quebec and Montreal to handle any tonnage we want.

By Mr. Keefer:

Q. It is generally asserted in industrial magazines that the coal-handling facilities on the Upper Lakes are practically the best?—A. Yes.

Q. How do the tidal facilities compare?—A. At Hampton Roads, Newport and Baltimore they have put up new expensive plants, which will handle coal very quickly.

Q. But at Montreal, Quebec and Lévis?—A. They are fair; they are not as modern as some of the other plants—Duluth for instance.

Q. That affects the cost?—A. Yes, although the proposition at the head of the lake is a different one, where it is largely based on the unloading facilities, for storage and reloading, while down here a large part of it is loaded directly from the boat to the cars and taken away.

By Mr. Cowan:

Q. Would it be a very expensive thing to modernize this plant?—A. I do not think anybody is suffering by the plants doing as they are now.

By Mr. Douglas (Cape Breton):

Q. Would it not be a fact that at Lévis, Quebec and Montreal you use the company's plants for discharging, and that being so, there is an additional charge?—A. Yes. At Lévis we use our own plant for any coal we bring in there; through Quebec or Montreal we would have to have the plant of the coal company.

Q. Have you any figures of the charge the coal companies exact for that purpose?—A. No, because their quotation so far has only been based on the delivered price on cars. They have insisted on carrying the coal in their boats.

By Mr. Keefer:

Q. Do you know how many boats they have?—A. I think the Dominion Coal Company has about seven boats.

Q. And would that be sufficient to carry all of your coal up?—A. Yes. It is true we could handle our coal, but we are in this position where our boats have all been turned over to us—the boats which the Government built as a war programme—and we figure it is far better to keep them operating than to tie them up.

[Mr. R. C. Vaughan.]

By Mr. Ross:

Q. Here is a point which Mr. Cook brought out yesterday. I understand that 2,000,000 tons of soft coal came in last year from the American districts?—A. Yes.

Q. Supposing we got back that market, and you get your supply from the Nova Scotia companies, would there be enough coal to employ all of the boats—the National boats and the coal company's boats?—A. I would say, if there were 2,000,000 tons more coming up the St. Lawrence, there would be enough business for all of us.

Q. That would not need to make that differential between your boats and theirs?—A. No, they want to try and force us to use their boats.

Q. But there would be no object in that?—A. No.

By Mr. Cowan:

Q. If you are taking this additional amount from them, they will still have their own trade in their own boats?—A. Yes, they can no doubt sell coal to the Grand Trunk, the C.P.R., and plenty of other people in Montreal.

The CHAIRMAN: Are there any other questions to ask Mr. Vaughan?

By Mr. Douglas (Cape Breton):

Q. Perhaps, Mr. Vaughan, you may have some statements that you care to file?—A. I have filed nearly all of them, Mr. Douglas. I have given you statements of the consumption. A good many of these statements are for my own use.

Mr. KEEFER: Unless you want them for some specific purpose, Mr. Chairman, I would advise not loading up the record too much.

The CHAIRMAN: There are one or two which perhaps should be included.

WITNESS: Here is one showing the total tonnage received during the season of 1919-20 and 1920-21.

CANADIAN NATIONAL RAILWAYS

Total tonnage received during the seasons 1919-20 and 1920-21.

	1919-20	1920-21
United States coal.. . . .	1,099,824	1,312,872
Eastern Canada.. . . .	914,425	1,064,690
Western Canada.. . . .	411,301	1,147,280
	<hr/>	<hr/>
	2,425,550	3,524,842

The 1920-21 figures include the G.T.P. approx. 400,000 tons. Balance of difference caused by small purchases account large stocks on hand from 1918 and also from practically no stocks on hand spring of 1920 and present large surplus.

WITNESS: I have another statement here which perhaps may be of interest to the members of the Committee.

This is a statement showing the American coal received, the points at which it is received, and the points where used during the seasons 1919, 1920 and 1921.

CANADIAN NATIONAL RAILWAYS

Statement showing American coal received, points at which received and points where used during the seasons 1919-20 and 1920-21.

Total Received	1919-20	1920-21
Water.. . . .	725,235	785,097
All rail.. . . .	328,673	527,775
Miscellaneous.. . . .	45,916	.....
	<hr/>	<hr/>
	1,099,824	1,312,872

[Mr. R. C. Vaughan.]

SPECIAL COMMITTEE

Points Received.	1919-20.	1920-21.	Where used.
Little Current.....	8,135	.....	Nipissing District.
Montreal, etc.....	221,376	387,279	Montreal, Sag. and St. Maurice.
Toronto and Cobourg.....	82,850	140,496	Ontario District.
Duluth.....	135,181	94,031	D.W. & P. Ry. and W. Lines.
Port Arthur.....	232,352	314,838	Western Lines.
Fort William.....	215,966	243,580	Western Lines.
Michipicoten.....	49,046	22,097	Cochrane, Sup. and Nip.
Key Harbour.....	100,742	106,882	Nipissing District.
Levis.....	17,386	.....	St. Maurice District.
Quebec.....	26,779	.....	Saguenay District.
Chicoutimi.....	10,011	3,669	Saguenay District.
	1,099,824	1,312,872	

Then this last statement shows the steam coal consumed during the years 1918, 1919 and 1920.

CANADIAN NATIONAL RAILWAYS.

STEAM COAL CONSUMED DURING YEARS 1918, 1919, 1920.

Year.	Canadian Northern Rlys.			Canadian Government Rlys.			D.W. & P.	G.N.R. C.G.R. D.W.P.
	W. Lines.	E. Lines.	Total.	W. Lines.	E. Lines.	Total.		Com- bined.
1918.....	1,133,411	424,092	1,557,503	289,909	1,165,481	1,455,390	53,786	3,066,679
1919.....	1,142,162	442,046	1,584,208	248,299	1,195,400	1,443,699	45,507	3,073,414
1920.....	1,533,791	536,471	2,070,262	317,647	1,192,300	1,509,947	60,516	*3,640,725
	3,709,364	1,402,609	5,211,973	855,855	3,553,181	4,409,036	159,809	9,780,818

*Including G.T.P.

The CHAIRMAN: Mr. Vaughan, we thank you very much for appearing here to-day and for the evidence you have given.

Mr. DOUGLAS (Cape Breton): I have just one further question I wish to ask.

Q. In reference to this 600,000 tons, that you want carried, via the Canadian Government Merchant Marine—was that all to be carried in Government ships, or was a proportion to be carried in the coal company's boats?—A. I think we gave them the privilege of carrying part of it. We allowed them to move 300,000 tons of our requirements in their own boats, in other words, we allowed the two companies, the Dominion and the Nova Scotia to move about one-half of our requirements. We said we wanted to move about 300,000 in our own boats.

The CHAIRMAN: Well, gentlemen, we have Mr. Dick on Wednesday. He was to have been here this week, but found himself unable to come. We will also have the two representatives from Alberta here on Tuesday next, so I would suggest that we arrange to meet on Tuesday and Wednesday of next week.

Mr. DOUGLAS (Cape Breton): There are some labour representatives, representing the employees of Nova Scotia, who desire to be heard.

Mr. KEEFER: We should certainly have called them later on.

The CHAIRMAN: I can see no objection to the representatives of labour being called if they wish to be heard. The meeting is now adjourned until Tuesday morning next, at 10.30.

The Committee adjourned until Tuesday, April 19, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425

TUESDAY, April 19, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: We have as the first witness this morning Mr. Caye, who is fuel purchasing agent of the Grand Trunk Railway.

Mr. GEORGE W. CAYE: called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. General purchasing agent of the Grand Trunk.

Q. How long have you held that position?—A. Six years.

Q. Had you any previous connection with the coal trade?—A. Yes, I was purchasing agent for the Grand Trunk Pacific for several years, at Winnipeg, and bought the coal for the company, and gave instructions, in part, for the operation.

Q. If you have a statement which you are prepared to make to the committee before we ask you any questions, we will be glad to hear your statement first.—A. Well, the position regarding the Grand Trunk fuel supply is a little more simple than some of the other roads in Canada, because we own a coal measure in Ohio to the extent of about 30,000 acres, and get the large proportion of our requirements from that coal operation. We have also made contracts from time to time with different coal companies, both on the American side and in Canada, principally the Dominion Coal Company.

By Mr. Cowan:

Q. Do you find it a profitable thing to operate this coal mine yourselves? I suppose you must, or you would not continue it?—A. They call it a gold mine now, instead of a coal mine.

Q. It is a gold mine, instead of a coal mine?—A. It has been for several years.

By the Chairman:

Q. How long have you had that source of supply?—A. I suppose since 1912.

Q. Why did the company think it advisable to purchase that acreage?—A. It was the idea of the late Mr. Charles M. Hayes. He thought, I presume, that it would be an excellent source of supply in case the local consumption fell off.

Q. That is, the local production?—A. Yes.

Q. Was there any reason to fear that the local supply might not be sufficient for the consumption?—A. I am sure I could not say.

Q. What advantages do you find in having that source of supply now, as compared with the Canadian sources of supply?—A. Well, our mines are working to capacity, consequently the cost per ton is very much lower than other mines in the same district, and apparently much lower than the cost of Nova Scotia coal.

By Mr. Keefer:

Q. What would be the difference, approximately?—A. At least \$2 a ton.

Q. As between what?—A. Between the Nova Scotia price at the mines and ours.

Q. At the pit's mouth?—A. Yes.

Q. Have you any idea to what that is due?—A. Well, I think it is principally due to the fact that we operate those mines to capacity.

[Mr. G. W. Caye.]

Q. What is the capacity you take out of those?—A. About 1,200,000 tons a year. We expect this year it will be 1,500,000.

By Mr. Cowan:

Q. Do you supply any other than the Grand Trunk?—A. No. Just the Grand Trunk alone, practically.

Q. You said a minute ago that this was a gold mine, instead of a coal mine; that means that you have been making an enormous profit on that; have you been charging the Grand Trunk the ordinary market price?—A. We get that coal at cost.

By Mr. Keefer:

Q. You save that much for the railway?—A. Yes.

By Mr. Cowan:

Q. It is not a subsidiary company at all?—A. It is owned by the Grand Trunk absolutely, I understand.

By the Chairman:

Q. What is the general fuel situation, according to the Grand Trunk's experience? Have you had difficulty in getting fuel?—A. We had difficulty last fall, but since about the 1st of December last the situation has been very easy.

Q. What were your difficulties last fall?—A. Well, there were more or less labour troubles on the other side—switchmen's strike—and embargoes were placed at different points at which we got this coal.

Q. Difficulties in the Canadian field?—A. I do not know; we did not get any coal last year from the Canadian fields at all. We asked the Dominion people if they could supply us with coal early last spring, the spring of 1920, and they said they could not.

Q. How much does the company use each year? What is the annual consumption?—A. The approximate consumption in Canada of the Grand Trunk is 2,000,000 tons.

Q. Did I understand that you got all that supply from the United States last year?—A. Practically.

By Mr. Keefer:

Q. What do you consider your coal is costing you at the pit's mouth to-day?—A. Well, I think perhaps that is confidential information.

Q. Very well, then I will not press for an answer; do you know what the price is in Nova Scotia at the pit's mouth to-day?—A. Only from this editorial that I cut from the *Gazette*.

The CHAIRMAN: That would not be evidence.

By Mr. Keefer:

Q. You have no personal knowledge? Do you bring that coal into Canada wholly by rail?—A. No, we bring in some of it by water.

Where?—A. From Lake Erie ports.

Q. To what place?—To Midland and Depot Harbour.

Q. Name all the Ontario ports to which you bring it in by water.—A. Midland and Depot Harbour.

Q. You do not take any in to Goderich or any other place at all?—A. No.

Q. None to Owen Sound?—A. No.

Q. How do you find your cost of transport after you get to Lake Erie—water as compared with rail?—A. It is much cheaper.

Q. How much, roughly speaking?—A. Well, we have a price for this year on coal of \$2 per ton from, say, Ashabula or Lorraine to Montreal.

[Mr. G. W. Caye.]

Q. Do you take it also to Montreal by water?—A. We have brought some down the past two or three years.

Q. That is, you brought your own coal?—A. Yes.

Q. Toronto and the central part of Ontario, both for yourself and any that you sell, would come in by the railways via Buffalo?—A. We do not sell any; it would come in via Buffalo, yes. Bridgeburg is our Canadian port.

Q. I have not yet got quite the difference in dollars and cents between bringing it in around by those ports to Ontario and bringing it by rail.—A. The coal that we ferry across from Charlotte to Cobourg comes from the Rochester and Pittsburgh Coal and Coke Co.

Q. Coke—you buy that?—A. Yes. It is from Central Pennsylvania.

Q. How much of that will there be?—A. Usually about 300,000 tons a year.

Q. Let us get the starting point; the total amount of the Grand Trunk's consumption—of purchase and mining—is how much?—A. About 2,000,000 tons a year.

Q. Of which you produce, out of your own properties, how much?—A. About 1,200,000 tons.

Q. And out of the total 2,000,000, how much comes in by water, as against what comes in by rail, approximately?—A. Well, I should think about 40 per cent.

Q. And that would be chiefly for the north-western part of old Ontario?—A. Yes.

Q. And you are taking a certain portion to Montreal to-day?—A. Yes, we are—all rail.

Q. When I say, "to-day," last year and this year?—A. Well we are taking a certain proportion of our own coal, that comes via Black Rock, to Montreal.

Q. It costs you \$2 to Montreal from the Lake Erie ports?—A. That is by vessel.

Q. And by vessel from Lake Erie ports to Midland?—A. 75 cents.

Q. Why the difference?—A. Well, I think it is largely on account of the fact that they can load larger vessels to Midland and Depot Harbour than to Montreal.

Q. What draught?—A. I presume, or I think, that they can load as large as a 10,000-ton vessel to Depot Harbour, and the maximum to Montreal down the canal is about 2,000 tons.

Q. So it takes five times the difference to carry to Montreal what you can carry to Midland?—A. Yes, and Depot Harbour.

Q. And necessarily the cost is greater?—A. Yes.

By Mr. Douglas:

Q. Does that \$2. include loading and discharging?—A. It includes the loading, but not the discharging.

Q. How much does the discharge cost you?—A. 35 cents a gross ton; practically about 32 cents a net ton.

By Mr. Keefer:

Q. That is the same for both Montreal and Midland—I mean the cost does not include the unloading at either place?—A. At Midland, we have another arrangement there that is different from the Montreal; we have an arrangement that includes the loading of the vessel at the Lake port; its transport to Midland; and handling charge there; and that is 75 cents a net ton.

Q. It would be quite saving to your company if you could transport to Montreal in the larger ship?—A. I think so.

Q. The same answer would apply to any other person taking in coal to Montreal?—A. I think so.

Q. We have heard that Montreal is opposed to the enlargement of the canal system; that is the reason why I asked you those questions; I want to see what the benefit to Montreal is; what is the railway charge to Montreal for coal if you had to take it by rail from Black Rock?—A. I am unable to say, but I can tell you what we credit ourselves on this coal business—\$2 a ton from Black Rock to Montreal.

[Mr. G. W. Caye.]

Q. Are you able to give this committee, as a railroad man, what is reasonable per ton of cost per mile for hauling coal?—A. Well, it is pretty hard to say.

Q. A fair and proper cost per mile?—A. Much depends on circumstances. If we bring this coal along in train lots, we can carry it very cheaply that way.

Q. And I suppose it is somewhat contingent upon return cargoes for the empty cars?—A. Well, these cars run between the mines and their destination.

Q. Coming back empty?—A. Yes, sir.

By Mr. Ross:

Q. Can you give us an estimate of what that will be in train lots?—A. 30 to 40 cars, 50-ton cars.

Q. How much per ton per mile in train lots?—A. We charge ourselves approximately half a cent a ton per mile on that coal. We are only bringing the surplus coal to Montreal district. We use most of it in Ontario.

By Mr. Cowan:

Q. Half a cent per ton per mile?—Mr. Vaughan the other day said it cost them seven-tenths of a cent per mile.

By the Chairman:

Q. Do you charge the half cent?—A. We credit ourselves that.

Q. You would not say that that was the actual cost of transporting the coal?—A. Oh, no.

By Mr. Keefer:

Q. Have you any idea of the approximate quantity of coal that you have upon your acreage in Ohio?—A. It has been stated recently that we had enough coal there to last a hundred years.

By Mr. Cowan:

Q. That is the property of the Grand Trunk? —A. Yes.

Q. If the Dominion Government takes over the Grand Trunk then that becomes the property of the Dominion Government?—A. Exactly.

By Mr. Keefer:

Q. There are other coal lands through those states that can be acquired to-day?—A. Yes, I think so.

Q. I have been so told?—A. Yes.

Q. At not a very exorbitant price?—A. Yes.

Q. Approximately about what?—A. Well, I should say about \$150 an acre was a maximum for undeveloped mines.

By Mr. Douglas:

Q. From the mines in Ohio until you come to the Lakes what is the freight cost?—A. 91½ cents.

Q. And then from the Lake ports to Montreal?—A. \$2.

Q. And the discharge cost at Montreal?—A. About 32 cents a net ton.

Q. And as I understood you, you made this statement, that your Ohio coal cost at the pit mouth \$2 a ton less than Nova Scotia coal at the pit mouth?—A. Yes, roughly, I would say so.

Q. Have you ever compared what it would cost you to bring Nova Scotia coal this year, for example, to Montreal, with what your Ohio coal would cost?—A. Yes, sir, I think I have that here. Our coal, ex-vessel, from Lake Erie to Montreal, would cost at Montreal, plus exchange and 53 cents per ton duty, \$7.94.

[Mr. G. W. Caye.]

By Mr. Keefer

Q. Do you know what the Nova Scotia coal was asking for it at Montreal?—A. It gives a price of \$8.10.

By the Chairman:

Q. This is the Grand Trunk coal, the coal from the Grand Trunk Mines?—A. \$7.94.

Q. There is a difference of 16 cents according to your figures, in favour of your coal at Montreal?—A. In favour of our coal at Montreal.

By Mr. Douglas:

Q. Will you give us the items showing how you make up this \$7.94?—A. Well, I think perhaps that mine price ought to be considered as confidential.

By Mr. Keefer:

Q. Pass that; the only thing is, if you give us the rest, we can figure it out?—A. I will give it anyway, I will take a chance. The mine price is \$2.30; rail freight, \$1.91½; vessel freight, \$2.; commission, .05; the duty, .53; wharfage at Montreal, .08; insurance, one half cent; discharging from the vessel through the plant on to cars, .31; exchange, .75; total \$7.94.

By Mr. McKenzie:

Q. Is there any profit on that?—A. Yes, that includes our profit.

Q. About what percentage do you have in profit?—A. Well, now, you get me into that same question again.

By Mr. Douglas:

Q. Do you mean profit on the mining of the coal?—A. Profit to the Grand Trunk road. (To the Chairman) I must ask that this statement be confidential.

The CHAIRMAN: Of course it is evidence, and all evidence is printed.

WITNESS: And becomes public property?

The CHAIRMAN: It becomes public property. Mr. Caye wishes that this information be considered private information. It is for the Committee to say.

Mr. CHISHOLM: Which information?

The CHAIRMAN: The information he has just given. Has the Committee anything to say about that? It is for the Committee to decide whether it is private information.

Mr. KEEFER: I think when an official of a railway comes here, we should respect him within reason; we should respect their reasonable wishes as to any information that they consider confidential, except in the public interest we could demand it.

Mr. COWAN: As an official of the railway company he would not be held blameable at all to answer any question, because we are permitted to ask him any question.

Mr. KEEFER: Yes, but it is a question of fairness on our part, whether we should force any information that he considers confidential.

Mr. ROSS: Who could possibly object?

Mr. CHISHOLM: Does the Chairman mean to say that the information given just now shall be held to be private?

The CHAIRMAN: That is Mr. Caye's request to the Committee, but of course if the Committee does not wish to grant that request, it will go in the evidence.

[Mr. G. W. Caye.]

By Mr. Keefer:

Q. There is no reason why what you have told so far should be confidential?—A. It is solely the profit we made on the Grand Trunk coal.

Mr. KEEFER: You wish to keep that; then I think we should not force you to tell that.

Mr. McKENZIE: Mr. Chairman, I am afraid that our inquiry would be rather abortive if we must recognize every piece of practical information we get as private.

Mr. KEEFER: Then let us go to it, and get it out of the coal companies in Nova Scotia, and see how much profit they make.

Mr. COWAN: We should exempt everybody else on the same ground. I do not see why it should be—

The CHAIRMAN: I think Mr. Douglas was asking a question when I stopped him.

By Mr. Douglas:

Q. You gave the price as \$7.94 for the Ohio coal; that was coal taken in partly by rail and partly by water?—A. No, that was absolutely all rail, which makes that coal more valuable, because it is not broken up so often.

Q. As I understand it, the quotations you gave were \$19½ rail?—A. Yes.

Q. And then you gave a rate of \$2, which was water-borne coal, or coal practically borne by water; what I am asking you is, what your rail coal cost you in Montreal?—A. Our rail coal is costing \$7.92.

Q. How is that made up?—A. That is made up of the mine price, say, \$2.30; rail freight, to our line, \$2.51; duty, .53; from Bridgeburg to Montreal, \$2; exchange, .58.

By the Chairman:

Q. If that coal were taken by water from Port Colborne, or from the nearest point to Bridgeburg to Montreal, would there be a substantial saving in freight?

By Mr. Keefer:

Q. From some American ports?—A. I do not think so. I am not prepared to say. We have never had that brought up, so far as I know.

By Mr. Cowan:

Q. Have you ever tried to negotiate with Nova Scotia companies, at all—to get a price from them which would enable you to substitute their coal for this foreign coal that you buy?—A. Yes, we have been a pretty good customer of the Dominion people for a good many years.

Q. If you are a good customer to them for a certain portion, why would you not be a good customer for the whole of it—that is, what you buy from other companies?—A. Well, because I do not think it would be economical to send that Nova Scotia coal into Ontario unless the price was very low.

Q. You think you are bringing it as far into Canada as it is profitable now to do?—A. Yes.

By the Chairman:

Q. When did you last buy coal from the Nova Scotia mines?—A. 1919.

Q. And none last year?—A. No, sir.

By Mr. Keefer:

Q. It was deliverable only as far as Montreal?—A. Montreal.

Q. By water?—A. By all water.

Q. Can you name the boats that were bringing coal those days?—A. No.

[Mr. G. W. Caye.]

Q. What types were they?—A. They were large boats—6,000 or 7,000 tons capacity.

Q. Not as large a carrying capacity as those that delivered it to Midland?—A. At Midland?—I think you are a little mixed there. I said a 10,000-ton boat would go to Depot Harbour. They are a different type of boat; they are what they call the self-unloader, and the type that goes to Midland runs about 5,000 to 7,000 tons.

Q. But the Depot Harbour boat would have a larger carrying capacity than those coming from Nova Scotia?—A. Yes, and they unload the coal right on the dock; they have an endless belt.

The CHAIRMAN: We will incorporate Mr. Caye's statement in the record

COST OF COAL AT MONTREAL FROM VARIOUS SOURCES.

Shipper.....	Dominion C. Co.	Nova Scotia S. & C. Co.	Rochester and Pitts.	Rochester and Pitts.	Rochester and Pitts.	Rail and river.	Rail and river.
Gateway.....			Rail via Cobourg.	Rail via Massena Springs.	Vessel ex Charlotte	Vessel ex Lake Erie	Rail via Black Rk.
Mileage over G.T.R.			264	96			433
Mine price.....			3.25	3.25	3.25	2.30	2.30
Rail freight.....			2.31	3.20	2.38	1.91½	2.51
Vessel freight.....					1.80	2.00	
Car ferry.....			0.50				
Commission.....						0.05	
Duty.....			0.53	0.53	0.53	0.53	0.53
Wharfage.....		0.08				0.08	
Insurance.....						0.005	
Discharging.....		0.30				0.31	
Total.....			6.59	6.98	7.96	7.19	5.34
G.T.R. haul at 5 mills.			1.32	0.48			2.00
U. S. Exchange at 12%.....			0.79	0.77	0.84	0.75	0.58
Total.....	8.10	8.38	8.70	8.23	8.80	7.94	7.92

(All figures are per net ton).

Via Black Rock.....	Bellaire to Erie.....	Rail mileage.....	189 miles.
	Erie to Montreal.....	Water mileage....	453 miles—642 miles small boats 2,000 tons.
	Bellaire to Montreal.....	Rail mileage.....	727 miles,
	Sydney to Montreal.....	Water mileage....	900 miles, large boats 7,000 ton.

Q. How much Nova Scotia coal did you purchase in 1919?—A. Very little; only 100,000 net tons, 70,000 of which was delivered during the season of navigation at Montreal and 20,000 additional tons were delivered at Portland. The balance was cancelled.

Q. Why?—A. Because they were hard up to fill their contract.

By the Chairman:

Q. How much did you purchase in 1918?—A. We only got 15,000 tons.

Q. Was there any special reason for your not dealing with them at all last year?—A. They refused to. They could not take on a contract.

By Mr. Keefer:

Q. Do you know why?—A. I think that perhaps they placed their tonnage elsewhere.

Q. They were exporting, were they not?—A. So I understand.

[Mr. G. W. Caye.]

Q. Where to?—A. Denmark and Holland.

Q. How much?—A. I could not say.

By the Chairman:

Q. It is not a discrimination as to prices?—A. No. In the last year, everything was obnormal on account of the European demand.

By Mr. Ross:

Q. What did they charge you for that in 1919?—A. \$6 a ton on cars at Montreal, from their plant on cars so we could distribute it where we want to.

Q. That is in 1920. Give us how much this year?—A. \$8.10.

Q. Coming back to your Ohio coal and Nova Scotia coal. You would have to pay against the Ohio coal the following: \$1.91½ for freight. Duty how much?—A. 53 cents.

Q. Exchange?—A. 75 cents.

Q. Making all told how much? \$3.19½.—A. Yes.

Q. Do you know what the freight rate to Montreal by water from Nova Scotia is?—A. I do not.

Q. We have heard it as being 90 cents and as low as 60 cents. \$3.19½ is what Nova Scotia coal would have to pay by way of freight, supposing the price at the pit mouth were equal, to any port of Ontario.

MR. COWAN: If the Government takes over the Grand Trunk, as they propose to do, then the duty of 53 cents would have to be taken over. It means it would be free trade in bituminous coal.

MR. DOUGLAS: If I understand, Mr. Keefer, it was \$3.19, being freight rate and duty.

MR. KEEFER That is freight rate and duty.

WITNESS: The freight rate from the mines to the lake, \$1.91½; the duty is .53 and exchange is figured at .75.

By Mr. Douglas:

Q. And the water freight?

MR. KEEFER: Leave the water freight to come next. What would that be, those three items would amount to how much?—A. \$3.19½.

Q. Now, the freight rate from Nova Scotia to any port in Ontario at the head of the Lakes would have that much to come and go against, provided they could deliver it on the vessel as cheaply as you could get it on the vessels at lake Erie?—A. Yes. It would seem so.

Q. What would be the ordinary freight rate or one continuous rate from Nova Scotia right to the head of the lakes, to Port Arthur, to Fort William?—A. It is beyond me.

Q. To Toronto. Any place you like to put it?—A. I am not familiar with the rates.

By Mr. Douglas:

Q. If you were talking about Montreal, particularly, as I understood it, and you had to be perfectly clear on it, as I understand it, it was the rail freight first, was \$1.91½ and \$2 by water freight?—A. Yes.

Q. And you added .05 commission; .53 duty; .08 wharfage, ½ cent insurance, and .31 discharge, as well as the rate of exchange?—A. Making a total of \$7.94.

Q. Apart from the price?—A. The price is included in this \$7.94.

By Mr. Cowan:

Q. In that price can you tell me what wages you pay your miners in that mine—A. The standard scale?

[Mr. G. W. Caye.]

Q. Is it the same as in Nova Scotia?—A. I understand it is.

Q. Why the difference in the cost of coal at the pit mouth in Nova Scotia and the cost in Ohio if the wages are the same?—A. Our mines down there are equipped with the latest appliances in the way of producing coal.

Q. Do you know whether they pay the same wages in all the mines?—A. They certainly do, or else we would have trouble there.

By Mr. Mackenzie:

Q. As I understand the drift of this examination, it is to compare the price of Ohio coal and Cape Breton and Nova Scotia coal delivered in Montreal. I wanted to know something about your system of mining in Ohio. Is it deep mining. How deep do you go for your coal?—A. I am afraid I cannot answer that in Nova Scotia.

Q. You do not know anything about it?—A. I never was out at the mines.

Q. And you do not know whether your miners have to contend with gas or water in the mines or anything like that?—A. All I know is the mines are supposed to be in pretty good shape and up to date.

Q. You can readily understand the cost of a ton of coal delivered on the surface depends largely on the condition under which you are compelled to mine?—A. Absolutely.

Q. There might be a great deal of difference between one mine and another?—A. Yes.

Q. You have no knowledge of the mining in Ohio?—A. I am sorry I have not.

By Mr. Keefer:

Q. Do you know what is the average cost of coal in the United States, say in Ohio and Pennsylvania?—A. It varies. It is my understanding that the present contract price for coal from the central Pennsylvania district is about \$3 at the mines.

Q. For Ohio, how much?—A. Ohio is about the same although one is occasionally able to pick up coal at a cheaper price.

By the Chairman:

Q. You have told us about this 300,000 which you purchased from other companies. You have not given us the cost of that. Can you give us a statement of that?—A. It is not a fixed price yet. We have not any contract with them this year.

Q. I understood you purchased 300,000 last year?—A. As a rule we purchased 300,000 from the R. & P. Company.

Q. It is the cost of delivery of that to the company we would like to get.—A. I have not the price last year but I have an estimate of the cost this year, based on \$3.25 at the mines.

By Mr. Keefer:

Q. What is the highest price you know of at the mines?

The CHAIRMAN: Just let the witness finish. What would the freight be on that.—A. \$2.38. That is from the mines to Charlotte, New York.

Q. The other cost?—A. \$1.80 for the ferry.

Q. To where?—A. From Charlotte to Cobourg. Duty 53 cents; exchange, 84 cents; \$8.80.

Q. That would be at Cobourg?—A. That is Montreal.

Q. So that this coal that you are purchasing from other companies costs you more at Montreal than the price—A. We do not bring any of that coal to Montreal. We use it in Belleville and Brockville; in that section. It costs us at Cobourg, \$7.96.

By Mr. Cowan:

Q. \$7.96?—A. Yes.

By Mr. Keefer:

Q. Do you happen to know the highest price that is paid for merchantable coal in Ohio and Pennsylvania? I asked you about the average?—A. Last year?

Q. At the pit mouth, yes.—A. Well, I think in a great many cases it was over \$10.50.

Q. At the pit mouth?—A. Yes.

Q. \$10.50?—A. Yes.

Q. As against your \$7?—A. Yes, that is spot coal.

The CHAIRMAN: Are we not asking Mr. Caye to answer a question which he is not prepared to answer? How can he know what other people are paying for coal. He knows what the Grand Trunk is paying.

Mr. KEEFER: He made inquiries.—A. In a general way the price of spot coal for immediate delivery, and the price of spot coal changes from day to day, has been as low as \$10.50 only during the past year.

Q. Just explain that a little further, what you mean by spot coal.—A. Spot coal is coal that is purchased for immediate delivery, and the price of spot coal changes practically from day to day.

Q. These other prices of \$3 are what?—A. Contract prices.

Q. Extending over what period?—A. A period of the year.

Q. I suppose they are fairly large?—A. Yes.

By Mr. Cowan:

Q. That is at the mine?—A. Yes.

By Mr. Douglas:

Q. Is the market price of spot coal higher than the contract price or sometimes the reverse?—A. At the present time it is the reverse.

Q. You are referring entirely to run of mine coal in all your examination so far?—A. Yes, practically.

Q. I think you said in 1919 you paid \$6.50 a ton for Nova Scotia coal in Montreal?—A. Six dollars and fifty cents.

Q. You got so many hundred thousand tons?—A. Yes.

Q. And you say in 1920 they asked you \$8.10?—A. No, they could not supply it in 1920.

Q. Is it this year they are asking \$8.10?—A. Yes.

Q. Can you give us any reason why they should vary those prices? Any reason in the market, or anything else why they should vary those prices, \$1.60? Is it excessive profits they are seeking?—A. I would not care to say.

By Mr. Cowan:

Q. Are the wages any different?—A. They are the same as they were last fall.

Q. The standard of wages in your mines is the same as they were?—A. Yes.

Q. Unless they had more gas or water down there than they had a year ago, the prices ought to be the same?

Mr. Ross: I think Mr. Caye may have some explanation in his own mind as to the price of coal and the supply of coal. Have you any idea at all, any information regarding the matter why that price should be increased \$1.60 at the mines, an increase between 1919 and 1921? You say wages have not increased?—A. That is simply my personal opinion that the mines have not been producing as much coal as they could. It may be they have had trouble down there for some reason or other, and a portion of these mines has been closed down a good deal, and if you lessen output you increase cost.

[Mr. G. W. Caye.]

By Mr. Cowan:

Q. The facts are the price has gone up in Nova Scotia while it has been going down at other points. That is your experience in the last two years?—A. Yes.

By Mr. Douglas:

Q. How much coal do you use in Montreal?—A. We use in Montreal district from 350,000 to 450,000 tons a year.

Q. Give us the average in each district in Canada?—A. I have not got that information, I am sorry.

Q. Can you state it generally?—A. The only details we have here are that we used last year 930,000 tons on the eastern lines, and 1,221,000 tons on the Ontario lines.

By Mr. Keefer:

Q. You are in charge of the fuel department only for general purchasing?—A. The general purchasing.

Q. Do you know if your company have ever given any consideration to the question of electrification between Montreal and Toronto of the road to save the coal?—A. Not to my knowledge.

Q. You are familiar with the anthracite question?—A. Somewhat. To some extent.

Q. Your road handles a lot of anthracite with the Midland Valley?—A. Yes, but we consume very little.

Q. It chiefly comes over your road?—A. I understand it does.

Q. How does it come in?—A. I am afraid I cannot give you much information on the anthracite question.

Q. You don't know whether the people who buy it bring it in by water or bring it by rail?—No.

Q. Do you know anything about the distribution of it to Ontario or anything of that kind?—A. No.

By Mr. Douglas:

Q. 2,000,000 tons of coal a year is what you use.—A. Approximately.

Q. How much of that is used in Canada?—A. It is all used in Canada.

Q. You have some lines in the States?—A. They buy their own coal at the present time. I am just speaking of their consumption in Canada.

Q. And the points at which it comes is Montreal, and what other points?—A. Sarnia, Windsor.

Q. How much at Sarnia?—A. I don't know whether we have that. This is an estimate only.

Q. For this year?—A. Last year their consumption and delivery; Midland, Ontario, 201,000; Depot Harbour, 142,000; Prescott, 27,000; Montreal, water coal, 158,000; Montreal rail coal, 236,000; Cobourg, 350,000; Black Rock, 774,000; Windsor, 51,000; Sarnia, 206,000.

Q. You have named pretty well all of your divisional points?—A. Yes.

Q. Don't you operate to Goderich?—A. No.

Q. Collingwood?—A. No.

Q. Owen Sound?—A. We never get any coal that way.

Q. You have lines of railway running to and stopping at these points?—A. Yes, but it is distributed at those points for the smaller places.

By Mr. McKenzie:

Q. How about Portland?—A. We use about 125,000 tons there a year.

Q. Where does that come from?—A. That usually comes from West Virginia.

By Mr. Keefer:

Q. By water?—A. By water.

By Mr. McKenzie:

Q. You have been buying that in Nova Scotia?—A. No, not altogether.

Q. You have been buying that in Nova Scotia in past years?—A. Not to my knowledge.

Q. Coal for Portland?—A. No. In 1919 they did not deliver the 100,000 tons we had under contract, so after the close of navigation they asked if we would take 20,000 tons by water to Portland which we wanted to go to Montreal, and we cancelled the delivery of 10,000 tons which they could not furnish.

By Mr. Cowan:

Q. Would there be any duty from Cape Breton to Portland?—A. There is no duty to New England from Nova Scotia.

Q. Is there an area that is exempt in the tariff?—A. I understand there is no duty at all.

By Mr. Keefer:

Q. What is the freight rate for coal up to Portland?—A. From Fort Richmond, which is a suburb of Philadelphia, to Portland is \$1.55 per gross ton.

By Mr. Cowan:

Q. You don't know what the water rate would be from Sydney to Portland?—A. I don't know.

By Mr. Douglas:

Q. What other costs enter into the purchase at Portland?—A. We have a handling charge, the Grand Trunk I think this year has no handling port at Portland. It was demolished last fall, so they had a handling charge of 35c per gross ton.

Q. What was the rail charge?—A. \$2.85 from the mine to Port Richmond.

Q. What other charges are there on the coal?—A. There is no charge. There is a war-tax on the rail freight and discharge freight which is about 3 per cent.

Q. That coal at Portland comes across into Canada does it not?—A. We consume it all in the state of Maine and New Hampshire.

The CHAIRMAN: Is there anything further you wish from Mr. Caye?

Mr. KEEFER: If you have asked all the questions for yourself, Mr. Chairman, I have nothing additional.

The CHAIRMAN: Any member of the committee would like to ask any further questions?

Mr. COWAN: I would like to know if you have found out everything you wanted. I have never seen the best results from the examination of a witness by the way we examined him.

Mr. KEEFER: I think we should make a rule that somebody should exhaust all the questions and after that it would be in order to ask individual questions.

The CHAIRMAN: We better have a meeting of the committee some day to see if we can arrange some system of that kind. If there are no other questions to be asked this witness we can discharge him.

By Mr. McKenzie:

Q. I just wanted to ask the witness one question. I would like to ask Mr. Caye if it is fair to sell coal at the prices you have mentioned in Montreal. Is that good business?—A. We are not selling this coal. We are using every pound of it.

[Mr. G. W. Caye.]

Q. Suppose you were a seller of coal, would it be good business, supposing the coal end of your business was independent of the railway, would it be a fairly profitable business for you to sell coal at the price you have mentioned at Montreal, \$7.94?—A. I am not prepared to say whether it would or not.

Q. If you had to go into the market and buy that coal you would have to pay a larger price for it? Some day we will reach the stage when we will have some of the operators from Nova Scotia and we will put your price up to them and we will say, "We have had a man from Ohio who sells coal and delivers coal to Montreal at \$7.94 a ton," and we will ask him if it is fair business. "What can you do?" That is the purpose of my question.—A. It seems to me that the only question that can arise in that connection would be the freight rates from Black Rock, say to Montreal. You want to add the price of coal at the mine, tariff rate, the regular tariff on that coal which would make the price higher here.

Q. Now, if you can for a moment convert yourself into a coal man—you know something about the coal business in Ohio,—give us for a moment your judgment as a coal man selling coal in Montreal; can you run up some figures at which you think, as a coal man, you could sell coal in Montreal, in competition with the world, at a fair profit?

The CHAIRMAN: Of course, I presume we should scarcely ask a witness to give evidence on a suppositious case. He is before us to give facts as he knows them, and he has given us the facts regarding the purchase of coal for the Grand Trunk Railway. When we get outside of that, of course we get beyond the boundary of his actual knowledge.

Mr. McKENZIE: Yes, but he does not quite say that. Of course, I do not press it one minute beyond what he can do, but I would like to have something that would assist us when we come to compare prices.

Mr. KEEFER: You have that in the prices quoted by Mr. Vaughan, at which he could buy those same kinds of coal delivered in Montreal, as against what the others would.

Mr. McKENZIE: I was not here. If you are satisfied on that point, all right.

The CHAIRMAN: We will have coal dealers before us who will probably be able to give us those figures.

Mr. McKENZIE: Will we have any American coal dealers—men who are handling their own coal and sending it across here?

The CHAIRMAN: Probably we will.

Mr. McKENZIE: I really think that this gentleman could give us a fair idea of what he could sell a ton of coal for at Montreal, produced from one of the mines over there, from his general knowledge of prices. If he says he cannot, of course—

WITNESS: I am sorry, but I do not think I could do that, because the production costs vary so much at different mines.

By Mr. Ross:

Q. Can you get at it this way; take that \$7.94 that you say you credit yourselves with for your coal in Montreal; now, the freight from the mine to the Lake port, you are charging the ordinary freight, what you would charge anybody else?—A. Yes.

Q. And the water rate is what anyone else would pay?—A. Exactly.

Q. And all the other charges are just the usual charges?—A. Yes.

Q. And you say you make a profit on that?—A. Well, we do; but would another mine owner be satisfied with the profit that we are accepting?

Q. He is hoggish; that is the very point, we are trying to make out.—A. Well, you have that statement of mine, which gives you the profit we are making.

[Mr. G. W. Caye.]

By Mr. Keefer:

Q. The Lehigh Valley sell coal to the public, don't they?—A. They have a sub-company, called the Lehigh Valley Coal Co.

Q. It is owned by the railway?—A. Yes.

Q. And they are in the business of coal merchandizing; the Grand Trunk have never considered that phase of doing that with soft coal?—A. No.

By Mr. McKenzie:

Q. As a matter of curiosity, I want to ask you about this quantity of coal which your company own; you answered that by general repute there was enough coal there for a hundred years.—A. To last a hundred years, yes, sir.

Q. What annual output were you figuring on when you said there was enough there for a hundred years?—A. I think it was based on the present output.

Q. What is the present output?—A. About 1,500,000 tons a year.

Q. A continuous output of 1,000,000 tons?—A. 1,500,000 tons a year.

Q. At that output, you have estimated you have coal for a hundred years?—A. I did not estimate it.

Q. Of course, I quite understand; that is the general understanding?—A. Yes.

By Mr. Douglas:

Q. Just to clear up one point; I think you said that if the regular tariff rate was charged on American coal, then it would be higher than this offer of Nova Scotia coal that was referred to?—A. Well, it would be higher than our cost here, if the regular tariff was applied, say between Black Rock—I am talking about all-rail coal; it would be higher. I do not know what the regular tariff is, but I am quite sure that it is more than half a cent per ton per mile.

Q. So that, in effect, you are preventing this 400,000 tons that you use in Montreal from coming in from Nova Scotia, and being used there, by charging yourselves up with half a cent a ton?—A. We are not preventing anything of the sort; we would be very glad to use Nova Scotia coal in preference to this coal of ours.

Q. Would not that be the effect, though?—A. It is perhaps, during the present time.

By Mr. Cowan:

Q. Do you know whether the half cent a ton per mile pays for the cost of carrying it?—A. I thought I answered that in stating that if the coal was handled in train lots, thirty to forty cars, it might yield a pretty fair revenue.

By Mr. Keefer:

Q. Do you know what the price of Nova Scotia coal is, at the wharf at Nova Scotia?—A. I do not.

By Mr. Douglas:

Q. Have you any discharging plant in Montreal?—A. No.

Q. Have you any suggestion how the Nova Scotia coal could be extended—the use of Nova Scotia coal—into this territory up here?—A. Any suggestions for the Committee?

MR. KEEFER: Which territory do you mean?

MR. DOUGLAS: Into the Montreal district, as well as further up the Lakes. Mr. Caye may have some suggestions.

By Mr. Cowan:

WITNESS: I am afraid that I have not. They have not supplied much coal in the Montreal district for the last four or five years.

[Mr. G. W. Caye.]

Q. If they were giving it to you at a price lower than you are now paying for that 300,000 or 400,000 tons that you buy, you would be quite prepared to substitute the Nova Scotia coal for the amount you purchase?—A. Well, we do not bring that coal that you refer to into the Montreal district; we use that at Brockville, and Belleville, and points adjacent; but we would be glad to use Nova Scotia coal in the Montreal district if we could get the supply, and if the price was right.

By Mr. McKenzie:

Q. What coal do you use now in the Montreal district?—A. We bring some of this rail and river coal that I was telling you about, both by water and rail. We also bring some Pennsylvania coal all-rail.

By Mr. Keefer:

Q. The Nova Scotia coal, as against your Pennsylvania coal, has got to play against \$1.91 to Lake Erie?—A. To Lake Erie.

Q. And 53 cents duty, and what else?—A. And the exchange.

Q. How much?—A. 75 cents.

Q. Then, the freight from Lake Erie down to Montreal?—A. Is \$2; that is, we estimate it at \$2.

Q. So it has \$5.19 of a margin, irrespective of cost at the pit's mouth?

Mr. Ross: Less the freight from Nova Scotia down.

By Mr. Keefer:

Q. That is what it costs you to freight your stuff down to Montreal, and pay the duty?—A. Yes.

Q. And they can bring it up to Montreal for 90 cents, and they have been doing it.

By Mr. Cowan:

Q. What price would you be prepared to pay at Montreal, under present conditions, for Nova Scotia coal? Have you any idea what price they would give you that would enable you to buy it there? What would you consider a fair price?—A. What I would like to have them do is to shorten that price of \$8.10 by the amount of the duty and the exchange.

Q. You think they are adding that?—A. No, I have not anything to say.

By Mr. Douglas:

Q. Well, you will not say that you would not take a Nova Scotia coal at just a cent or two below the American price, \$7.94?—A. Well, I do not know.

Q. You do not mean to say that it has to be \$1.00 or \$1.25 below American coal in order to take it?—A. No, but that is what I said I would like.

Q. Would you be prepared to take Nova Scotia coal at a few cents below the best price you are getting for American coal—\$7.94 and \$7.92—or are you tied up now so that you cannot take this coal?—A. We do not want a pound of coal at the present time. We are not in the market.

Q. Why?—A. Because we have six weeks' supply on hand, and it is coming freely from our own mines.

Q. Are you under contract?—A. No, we have no contract.

Q. With any other person or company?—A. We are just sitting tight.

By Mr. Cowan:

Q. Is your own mine supplying all your requirements now?—A. Practically, they are supplying our current requirements, with the small quantity that we are getting across to Cobourg.

[Mr. G. W. Caye.]

By Mr. Chisholm:

Q. I think that miscellaneous questions that have been asked reveal the information I was looking for; but what I was going to ask was whether this gentleman is prepared to take coal from Nova Scotia for, say, 10 cents less than \$7.94?—A. Well, I would not like to say.

Q. You would not like to answer that?—A. I would not like to answer that, for certain reasons.

Q. The only answer you give to that question, as I understand it, is that you would consider it if the coal were offered to you from Nova Scotia for a price so much less than \$7.94; that is, made up of the exchange and the duty and the difference in freight, and so on, which would of course be quite a spread?—A. Yes.

By Mr. McKenzie:

Q. How many tons per annum of American produced coal do you use on your system of railways in Canada?—A. Approximately 2,000,000 last year.

Q. That is, mined in the United States, and brought into this country?—A. Exactly.

Q. And practically you displace labour and production in this country, at all events, to that extent?—A. We could not get the Nova Scotia coal last year.

Q. And you will not take it unless you get it at a sacrifice?—A. Not at a sacrifice.

Mr. KEEFER: \$5 and some odd cents of a margin.

By the Chairman:

Q. I think you stated that you could not get Nova Scotia coal last year?—A. Last year.

Q. They would not make contracts with you at all?—A. They would not supply it, for reasons best known to themselves.

By Mr. Douglas:

Q. You said you were not in a position to state whether your railway would take it or not if you got coal a few cents a ton less than the American coal, from the Nova Scotia fields?—A. No.

Q. Who is in a position to state that?—A. Well, our management; because there are one or two things that enter into a transaction of that sort.

Q. Whom would the committee call for that purpose, to ascertain the reason?

Mr. KEEFER: Let him give the questions that enter into it.

WITNESS: Well, I have not any personal knowledge of this, so perhaps I should not make the statement, but it is said that the Nova Scotia coal breaks up very fine; it is friable; it does not stand transportation as well as American coal and it is worth quite a little less per ton on that account. That is hearsay.

By Mr. Douglas:

Q. Hearsay?—A. Yes, that is not evidence.

By Mr. Keefer:

Q. The quantity of Nova Scotia coal you took into Montreal in 1919, was what?—A. We had a contract with them for 100,000 tons, 70,000 of which they delivered during the season of navigation.

Q. Is that the largest amount they have ever delivered to you in a year?—A. No; in 1912 we bought 400,000 gross tons from them, and they delivered every ton of it.

Q. At what price?—A. I thought I was going to get away. In 1912, we had a contract for 400,000 gross tons at \$2.92½ f.o.b. cars, Montreal.

Q. \$2.92½, for which they are asking to-day how much?

The CHAIRMAN: Just let him complete his statement now.

[Mr. G. W. Caye.]

WITNESS: The largest contracts we ever had with them, as far as I know, were made in 1914 and 1915—450,000 gross tons each year, at \$3 a ton f.o.b. cars, Montreal.

By Mr. Keefer:

Q. Is there any reason known to you why that price is double now?

Mr. DOUGLAS: Perhaps we might have this statement completed; this whole statement has reference to coal contracted from 1912 to what date?

WITNESS: From 1912 to 1920, inclusive.

The CHAIRMAN: Let us hear the statement you have, and let us have no interfering questions.

Mr. KEEFER: It is well to get some of these into the evidence as we go along; in 1912, it was what?

WITNESS: 400,000 tons.

The CHAIRMAN: Let the witness read the statement in full.

The witness then read the following statement:—

DOMINION COAL CO.

MONTREAL VESSEL COAL.

—	Tonnage.	Price.	Deliveries.
		\$ cts.	
1912.....	400,000	2.92½	Complete.
1913.....	400,000	.....	"
1914.....	450,000	3.00	"
1915.....	450,000	.....	Delivered 350,000 at Montreal and 40,000 at Portland. Balance cancelled are reduced consumption.
1916.....	150,000	3.75	Reduced to 75,000 account inability of Coal Co. to furnish full quantity.
1917.....	7,000	7.70	*Complete.
1917.....	20,000	7.50	"
1918.....	15,000	8.40	"
1919.....	100,000 (Net tons)	6.50	About 70,000 delivered at Montreal in 1919 and 20,000 at Portland and Montreal in 1920. Balance cancelled.
1920.....	Nil.	.....

All figures are gross tons, except 1919 tons.

*Furnished by Coal Co. at \$4.50 or \$5.05 f.o.b. vessel, Sydney.

We provided vessels at \$2.65 gross.

By Mr. Douglas:

Q. Why do you mention the word "net?"—A. They are all gross tons before that.

By Mr. Keefer:

Q. In the 1919 item you mention, "balance cancelled;" by whom was it cancelled?—A. It was cancelled by us, because they pleaded inability to make delivery of the balance. They had hard work to make delivery of the 90,000 tons.

Q. The net quotations would be equivalent to what?—A. Practically ten per cent less.

By Mr. Cowan:

Q. You said a little while ago that you had to report that this coal was not as good a quality; have the engineers on the road ever complained as to the use of it; are they satisfied that this is good coal?—A. It is good coal, all right.

[Mr. G. W. Caye.]

Q. And there is no reason at all why it should not be used from the engineering point of view?—A. Well, I do not know about that. We have had more or less trouble from the firemen, who claim that they have to fire it very thinly; when it is lumpy they can fire the coal much easier.

Q. Is that peculiar to Nova Scotia coal, or do you find the same with the other coal?—A. There is a larger percentage of slack in Nova Scotia coal when it reaches Montreal on cars, because it is handled so often.

By Mr. Douglas:

Q. It is not handled any oftener than the Ohio coal?—A. No, not the Ohio coal, but I think the Ohio coal stands transportation better; it is harder; but when we get the Ohio coal in our cars at Montreal, there is only one handling, practically, that is, at the mines.

Q. What about the water-borne coal?—A. The water-borne coal, so far as I know, ought to be practically the same.

Q. Do you know how the offers for Nova Scotia coal to your railway this year compared with the offers of the Nova Scotia coal companies have made to the Canadian National railway?—A. I do not.

By Mr. Cowan:

Q. Have you asked them for any prices?—A. The Nova Scotia people, yes, we took that up about the middle of March. We usually test the market then to see if it would be to our advantage to make contracts, around the 1st April.

Q. What price did they quote you?—A. \$8.10 at Montreal.

Q. That is the Dominion coal?—A. Yes.

Q. What other companies had an opportunity to quote?—A. Nova Scotia Steel.

Q. That is associated now with the Dominion Coal?—A. Yes, but before that they perhaps were not, that is, the middle of March.

Q. Did they quote?—A. They quoted a price of \$8.00, but they did not include the handling charge, nor the wharfage at Montreal, which we figured would be 38 cents.

By Mr. Douglas:

Q. Did you get Inverness to quote?—A. No, we never bought any coal from them that I know of.

By Mr. Chisholm:

Q. Are you in the habit of asking quotations only from the two big concerns, as we call them down there?—A. Yes because they have facilities in Montreal for handling the coal. Each of them has a handling plant.

By Mr. Douglas:

Q. I think you said the Grand Trunk did not have?—A. No.

Witness retired.

The CHAIRMAN: We have from Alberta to-day the Hon. Mr. Coté, Prof. Pitcher, and Mr. Young from the coal operators. I am sure you will be glad to hear from Mr. Coté now.

Hon. J. L. Coté, called, sworn and examined.

By the Chairman:

Q. What is your official position, Mr. Coté?—A. I am Provincial Secretary for the Province of Alberta, and Minister of Mines of the province.

[Hon. J. L. Coté.]

Q. You have prepared a statement?—A. I did not know what scope your investigation was going to carry, and therefore, my information is merely a statement of the official documents we have, or information that we have in the province of Alberta on our coal fields. We have Prof. Pitcher, of the University, who was ten years in the Nova Scotia fields, and about ten years in Alberta, and who is now a professor of mining in the University of Alberta, and I dare say he will be pleased to give you any technical information that you wish. First, we have a map prepared, showing the mines of Alberta. Both these maps are the same, except that one shows the geological formation. Mining started in Alberta in about 1881, on the banks of the river at Lethbridge. A mine was opened at Anthracite, on the main line of the C.P.R., from which coal was obtained for use of locomotives and boilers in connection with the heavy construction work encountered in building that railway through the Rocky Mountains. Mining of coal commenced in the Crow's Nest Pass in 1900, when a mine was opened up at Frank. In the Edmonton-Clover Bar field mines have been in operation since 1897. In Drumheller since 1911, in Namao since 1896, in Carbon since 1898, Medicine Hat since 1899; in Jaspar Park, Mountain Park, Lovett, Wabamun, Brazeau since 1910. This map illustrates the mine fields; the red colour shows the mines that are in operation in Alberta now, and the green colour shows the mines that have been closed within the last fifteen years. The number of mines is marked on the map in ink, and in the annual report on the Mineral Resources of Alberta, for 1919, the number and location of every one is shown. Coal extends much further than this map shows; this is only practically from the Crow's Nest to Edmonton. We do not know the extent of our coal fields north of Edmonton, but they are very extensive. We claim about 85 per cent of the coal of Canada. This is the information that is collected from our reports. The amount of coal produced during 1920 is approximately 6,908,823 tons. The number of mines operating during 1920 were 298 mines. There were 50 mines that were re-opened during 1920, and the number abandoned during 1920 were 17. The number of mines closed but not abandoned were 45. The number of men employed on December 31, 1920, were 12,348. The average number of men employed during 1920 are 9,688.

By Mr. Ross:

Q. What is the average number of men?—A. 9,688. The number of days the mines were idle during 1920 were ninety days. That is the average.

By Mr. Cowan:

Q. The average for each mine?—A. The average for each mine. The approximate capital invested in the equipment of the mines was about \$40,110,000. The capital invested in development and equipment of abandoned mines up to December 31, 1920, was about \$10,000,000 lost capital.

By Mr. Blair:

Q. Where are these mines located principally?—A. All the abandoned mines are the ones coloured in ink.

By Mr. Cowan:

Q. Would you tell us why they were abandoned?—A. Ostensibly most of them were abandoned for lack of market for their coal. Of course there are some other reasons. There is mismanagement in some of them, there is no question of that, but there are only three that were closed on account of the coal being extracted. The Hosmer was a mine that was owned by the C.P.R. and they closed it. Of course they had all the market on account of being C.P.R. Probably the other men from Alberta will be able to give you more information.

[Hon. J. L. Coté.]

By Mr. Cowan:

Q. You say that ninety days' idleness represents the average of each of them?
—A. Yes.

Q. You say they closed on account of lack of market?—A. Lack of market. They had local strikes, but no strikes to amount to anything.

By Mr. Mackenzie:

Q. Might I suggest the witness give a full statement first and let the members ask him what they want to ask him afterwards. Let him make his statement consecutively as he wants to make it.—A. The amount of coal sold in Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia and the United States and by railways in 1920: in domestic coal, which is generally taken from the Valley river from Edmonton down to Valley river, 1,370,595; British Columbia, 54,115; in Saskatchewan 1,134,280; in Manitoba, 456,000; in Ontario, 13,281; in Quebec 30 tons.

By Mr. Ross:

Q. 30 tons.—A. Evidently a sample. United States, 37,893 tons, making a total of 3,066,599 tons. That is the domestic field.

In the bituminous field in Alberta, 266,225 tons.

Q. What kind of coal was this?—A. That is bituminous steam coal. We have got three classes of coal there. We have a coal we call domestic.

Q. What kind of coal is it?

Mr. COWAN: They have different names. Nova Scotia has the same coal we have with that exception.

By Mr. Ross:

Q. What is the difference between domestic and bituminous?—A. I could not tell you the whole of the technical differences. Probably you had better wait for Mr. Pitcher to give you those differences. Alberta bituminous, 266,225; British Columbia, 69,675; Saskatchewan, 171,209; Manitoba, 143,202; Ontario, 630; in the United States 115,415; sold to railroads, 2,506,507. Total 3,272,863.

Anthracite we have in Alberta, 10,382; British Columbia, 5,059; Saskatchewan, 4,657; Manitoba, 1,356; United States, 302; sold to railroads, 10,048. A total of 31,804.

Briquettes, 81,606 tons in Alberta; British Columbia, 27,000; in Saskatchewan, 10,897; Manitoba, 6,484; sold to railroads, 72,453, making a total of 101,693.

The possible production with the appliances and equipment with increase of labour, we could produce in Alberta about 12,000,000 tons of coal.

By Mr. Cowan:

Q. That is with your present equipment?—A. With our present equipment.

Q. Possible production with present labour, plant and equipment?—A. About 9,500,000 tons. Coal imported into Western Canada from the United States during 1920, 2,436,786 tons.

Q. Do you know what grade of coal that is?—A. Most of it bituminous.

By Mr. Douglas:

Q. Have you got it by provinces?—A. In the western provinces, no, I have not, but mostly in Manitoba.

Q. You cannot give Alberta?—A. I don't think there is anything imported into Alberta. I have the total imported into Canada from the United States in 1920 20,815,596 tons. The total production of coal in Canada was 16,985,053.

[Hon. J. L. Côté.]

By Mr. Keefer:

Q. Of which you produced 6,900,000 tons?—A. And the coal exported from Canada during 1920, 2,558,174 tons. Consumption of coal in Canada during 1920, 25,242,465 tons. With regard to transportation, I have some figures. I had better leave it to Mr. Young, of the operators. We paid about 60 mills per ton mile from Alberta to Winnipeg 6 cents per ton mile to Winnipeg. We paid more to Saskatoon.

Q. What is the mileage to Winnipeg?—A. About 931.

By Mr. Cowan:

Q. That is from Northern Alberta? Does it make any difference?—A. It does not make much difference.

Q. For a short distance it costs more per mile?—A. Yes, it costs more per mile. They go to British Columbia and Prince Rupert. I believe we have a rate there of about 4 cents per ton mile.

By Mr. Ross:

Q. Is that in train load lots?—A. In car lots. Of course I am not going to enter into that. I believe our transportation companies are not doing what is correct towards our field, however. For instance, to give you an example, in some of our mines, when the California Oil Burning Engines were coming in spotting cars to our mines, we felt that the transportation companies were not doing what is right by our fields.

Q. That is, the charge would be too much?—A. In burning oil while they were in the coal districts; California oil, coming to away up in Northern Alberta.

Q. What road was that?—A. It was the Grand Trunk. The oil was coming to Prince Rupert by water and coming right up to Alberta in their oil burning engines. When the mines are working we find it is very hard to get necessary car supplies and we have to close down for lack of cars because the season for operating coal corresponds with the weak transportation, and most of our companies have not got the necessary equipment to furnish an ample supply of cars. I do not know whether I should bring that before your Committee.

By Mr. Ross:

Q. Sure you should.—A. My idea was,—I have spoken in our House to the effect that if we wish to extend our market for Alberta coal we will have to get water transportation.

By Mr. Cowan:

Q. Can you get it?—A. I think so.

Q. How?—A. By improving the Saskatchewan river. I have a report here. The Public Works Department here have made an extensive survey of the Saskatchewan River and the report of their engineer shows that by spending \$20,000,000 in improvements on the Saskatchewan River they could have a six foot canal or at least a six feet channel from Edmonton to Winnipeg, enabling you to transport your coal for about 1½ mills to Winnipeg.

By Mr. Keefer

Q. Just to enlarge that for a moment, by improving the Saskatchewan?—A. Yes.

Q. That is the North Saskatchewan?—A. I think both. If this route was opened you would have to go into storage of water in the mountains, in tributaries of the Saskatchewan, and therefore develop a hydro-electric power which would partly pay the expense of that navigable river, and would supply electricity at the different places.

By Mr. Cowan:

Q. Would that all be included in the estimate of \$20,000,000?—A. I am afraid this estimate is low. I think it would cost more than that. I feel this way, that you might want to enquire as the possibility of supplying Ontario or Canada with our coal if necessary. You have Nova Scotia coal coming to the West, and we have Alberta coal coming the other way to meet the Nova Scotia coal.

Q. You ought to be able to get your coal by water to Winnipeg at 1½ mills?—A. I have a report of the engineers on that question, and they claim, I think it is about 1 mill per ton mile from the Ohio River. Of course the Saskatchewan River can only operate about six months, and therefore it would be dearer.

By the Chairman:

Q. I suppose they could get return cargoes?—A. Probably return cargoes. I figure this way. If you had to buy equipment and put in necessary equipment it would cost \$80,000,000 to handle the coal that would come down.

By Mr. Ross:

Q. Could you use the same cars for coal that are used for grain?—A. They do, yes. They use the box car a great deal.

By Mr. Chisholm:

Q. You mean to say 1½ mills, not 1½ cents per ton mile?—A. 1½ mills, yes.

Q. By rail?—A. It is about 5½ or 6. 6/10 of a cent. I gathered quite a bit of information with regard to the Saskatchewan River navigation, thinking it will eventually come, but it will eventually be the route and a long time ago I brought before the Board of Trade of Edmonton that fact, about ten years ago, and they started to make surveys which proved quite correct.

By Mr. Keefer:

Q. Would you mind telling us what cities that water would serve en route to Winnipeg?—A. Saskatoon.

By Mr. Cowan:

Q. That is on the South Saskatchewan?—A. It would reach either way Prince Rupert. You have all the mining of Northern Manitoba which will become, if our information is correct, very important.

Q. If you could navigate the South Saskatchewan you could bring your coal down within 30 miles of Regina and all these points?—A. I have some information on the labour situation. In 1912 the average man used to produce 534 tons per man per year. The production for a man in 1920 was 675 tons, showing that we have been working more steady in 1920 than we were.

Q. What is the daily average? Has it increased also?—A. That is based on the daily average for the year.

Q. Have they any more machinery?—A. No, I think they work more days than they used to in 1912.

By the Chairman:

Q. To make that clearer, you say they produced on an average 675 tons per man per year. Is that assuming that they are working full time?—A. No, that is for the time they worked. If they worked full time they would produce a great deal more.

Q. The former figure you gave, 534 tons, was that for the same number of days?—A. No, that is for the year.

By Mr. Douglas:

Q. What two years are you comparing?—A. 1912 and 1920, showing we have been working more days in 1920 than in 1912.

[Hon. J. L. Côté.]

Q. Might the men be producing more each day?—A. Of course it might be but I doubt it. I think the tendency is to produce less.

By Mr. Cowan:

Q. That is what I want to get at.—A. Probably Mr. Young will be able to give you more information about that. He is a Western coal operator, Secretary of the Western Coal Operators.

By Mr. Keefer:

Q. Do you happen to know why the output of Alberta dropped from 20,000,000 tons to what it was in 1918?—A. It is partly on account of American coal coming in, competition. The amount of money spent on wages in 1920 in Alberta was \$19,301,065. Then we have our workmens' compensation. We have the Government Compensation Act. That is to say, every man is insured and we collect $1\frac{1}{2}$ percent on the wages that are paid and therefore this amount ought to be very accurate.

By Mr. Ross:

Q. I would suggest, Mr. Coté might be seated if he cares to. It must be tiresome standing there.—A. Making a cost per ton during 1920 for labour alone of \$3.04.

Q. For labour alone, which means the labour we figure in mining is about two-thirds of the cost of the coal.

By Mr. Cowan:

Q. What was the cost of coal at your pit mouth, do you know?—A. Sixty-six per cent. We figure it would be \$5.05.

By Mr. Douglas:

Q. Is that cost of \$3.03 on the net or gross ton?—A. It is all 2,000 in Alberta. We have no long tons that I know of.

Q. Is that the way the costs are kept though?—A. Yes. We have the number of tons produced in Alberta coal. I doubt if it includes the coal that is burned at the mines, but we have the number of tons produced and we have the wages paid, and it ought to be a very fair statement. The mining Department keeps an account of the coal produced.

Q. Is there any record of coal produced you keep beside that?—A. No, of course the companies would you know.

Q. But the mines are not required to submit the costs of operation to the Provincial Government?—A. No. They pay 1.50 per cent on their wages and they have to report on their production too.

By the Chairman:

Q. Just to remind you of the suggestion of Mr. McKenzie, I believe we will get all this information if we allow Mr. Coté to go on. Mr. Coté figures the cost by taking the wage rate and dividing it by the number of men and by the tonnage?—A. By the tonnage, yes.

By Mr. Douglas:

Q. That would take into account all costs, all expenditures, construction as well as operation of the mine. It will take in construction?—A. It would take in construction.

By Mr. Chisholm:

Q. What do you mean by construction?

[Hon. J. L. Coté.]

Mr. DOUGLAS: All expenditures of the mine, every dollar expended in wages go into that amount, whereas the cost of production would necessarily be very much less than the \$3.03 that he quotes.

The CHAIRMAN: If Mr. Coté does not know this, Mr. Young will be in a position to give us authentic information of it?

The WITNESS: The output during the month of April, 1919 was 85,478, with an expenditure for wages of \$308,025, making the cost per ton for labour alone \$3.60. You will see it was on account of the smaller output.

Q. Do you know whether they pay the standard rate of wages to miners in Alberta?—A. Yes. I have here the scale of wages that we pay under the Director of Mining appointed by the Dominion Government, and he probably will be able to get that information from the Department. I can leave that statement to you.

Q. Would you make in general a statement as to what wages were paid, the wages of the Western Confederation of Miners?—A. Yes. In No. 18, for instance, a bottom man that was paid in 1912, \$2.89 for ten hours is paid now in 1920, \$7.08 per eight hours.

By Mr. Cowan:

Q. Are they required to produce a certain amount of coal for that?—A. As to that, our Mr. Young of the Western Coal Operators will be able to give you that. We will take a tripple engineer that was paid for ten hours \$3.40, he is now paid \$7.61.

By Mr. Ross:

Q. Is that an eight hour day?—A. Yes, I think it is eight hours now.

Q. It was ten before?—A. I can leave with your Committee if you like all these statements of wages.

The CHAIRMAN: I think it should be left. Do you think it should be inserted in the record in detail?

Mr. COWAN: I think so.

Statements handed in as follows:—

District.	1912.			1920.		
	Men Employed.	Output.	Output per man.	Men Employed.	Output.	Output per man.
C. N. Pass.....	2,261	1,500,594	663	1,918	1,775,529	925
Lethbridge.....	935	624,150	667	1,427	850,662	596
Taber.....	430	124,795	290	292	133,627	456
Banff and Canmore.....	906	385,485	425	627	287,507	1,465
Drumheller.....	115	14,581	126	1,782	1,210,687	679
Edmonton—Clover Bar.....	503	208,888	415	644	386,750	1,277
Pembina.....	104	3,265	31	153	146,810	959
Yellowhead and Mt. Park..	191	28,415	149	860	678,522	1,545
Jasper Park.....	134	113,701	840	441	235,584	534
1914.						
Brazeau.....	342	157,351	460	669	453,875	678
Average output per man....			534			676

The amount of money spent on wages during 1920 was \$19,301,065.19, making a cost per ton during 1920 for labour alone of \$3.03.

The output during the month of April, 1919, was 85,478 tons, with an expenditure for wages of \$308,025.21, making the cost per ton for labour alone during that month of \$3.60.

It will be noted that owing to the smaller output during the month of April, 1919, the cost per ton was a great deal higher than the average cost per ton for labour during the year 1920.

[Hon. J. L. Coté.]

The percentage of cost per ton for labour to total cost per ton is about 65 per cent.

The Workmen's Compensation Act provides that any person injured gets 55 per cent of his wages during the time he is off work and if a man is killed his widow gets \$35 per month for life or until she re-marries when she gets a bonus and the children receive \$10 per month until they are sixteen.

In addition to this, medical attention is provided.

Old Act, \$10 per week; maximum, \$16.

In case of fatal accident, \$30 a month for widow.

Rescue, \$40 a year from compensation money.

SCALE OF WAGES PAID IN THE PROVINCE DURING THE YEARS 1912 TO 1920.

Occupation.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<i>Outside Wages.</i>								Fire bo about \$190 8 hr. day	asses 1920 per mth. 8 hr. day
Fire bosses.....	\$110—\$115 per mth.	Same.	Same.						
Bottom man.....	10 \$2 89	10 \$2 89	10 \$2 89	10 \$2 89	10 \$2 89	9 \$3 66	9 \$3 66	5 22	\$7 08
Slate pickers (boys).....	10 1 37	10 1 37	10 1 37	10 1 37	10 1 37	9 1 76	9 1 76	3 05	4 03
Slate pickers (men).....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Car oilers (men).....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Car oilers (boys).....	10 1 65	10 1 65	10 1 65	10 1 65	10 1 65	9 2 13	9 2 13	3 48	4 40
Tally boys.....	10 1 37	10 1 37	10 1 37	10 1 37	10 1 37	9 1 76	9 1 76	3 05	4 03
Teamsters.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66	5 22	7 08
Blacksmith.....	10 3 85	10 3 85	10 3 85	10 3 85	10 3 85	9 4 72	9 4 72	6 43	8 14
Blacksmith's helper.....	10 2 90	10 2 90	10 2 90	10 2 90	10 2 90	9 3 67	9 3 67	5 23	7 09
Power-house engineers.....	12 3 85	12 3 85	12 3 85	12 4 40	12 4 40	11 5 35	11 5 35	5 83	7 61 to 8 32
Power-house engineers... Fan-men.....	8 3 40 12 2 90	8 3 40 12 2 90	8 3 40 12 2 90	8 3 40 12 2 90	8 3 40 12 2 90	8 4 19 11 3 67	8 4 19 11 3 67		
Hoisting engineers.....	8 3 20	8 3 20	8 3 20	8 3 20	8 3 20	8 3 97	8 3 97	5 57	7 39 to 8 05
Hoisting engineers.....	10 3 78	10 3 78	10 3 78	10 3 78	10 3 78	9 4 63	9 4 63		
Hoisting engineers.....	12 4 40	12 4 40	12 4 40	12 4 40	12 4 40	11 5 35	11 5 35		
Tail rope engineers.....	8 3 63	8 3 63	8 3 63	8 3 63	8 3 63	8 4 46	8 4 46	6 13	7 88
Tail rope engineers.....	10 3 85	10 3 85	10 3 85	10 3 85	10 3 85	9 4 72	9 4 72		
Endless rope engineers.....	10 3 30	10 3 30	10 3 30	10 3 30	10 3 30	9 4 08	9 4 08	5 70	7 50
Box-car loader engineer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Tipple engineer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Screen engine tender.....	10 2 65	10 2 65	10 2 65	10 2 65	10 2 65	9 3 34	9 3 34	4 86	6 76
Loc. engineer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Loc. switchman.....	10 3 00	10 3 00	10 3 00	10 3 00	10 3 00	9 3 78	9 3 78	5 36	7 20
Fireman.....	8 2 89	8 2 89	8 2 89	8 2 89	8 2 89	8 3 66	8 3 66	5 22	7 08
Fireman.....	12 3 85	12 3 85	12 3 85	12 3 85	12 3 85	9 4 16	9 4 16		
Fireman's helper.....	10 2 65	10 2 65	10 2 65	10 2 65	10 2 65	9 3 34	9 3 34	4 86	6 76
Rly. car helper.....	10 2 60	10 2 60	10 2 60	10 2 60	10 2 60	9 3 28	9 3 28	4 79	6 70
Tipple dumper (man).....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66	5 22	7 08
Tipple dumper's helpers.....	10 2 64	10 2 64	10 2 64	10 2 64	10 2 64	9 3 33	9 3 33	4 85	6 75
Tipple dumper (boy).....	10 1 65	10 1 65	10 1 65	10 1 65	10 1 65	9 2 13	9 2 13	3 48	4 40
Top cages.....	10 2 64	10 2 64	10 2 64	10 2 64	10 2 64	9 3 33	9 3 33	4 85	6 75
Car repairer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Car repairer's helper.....	10 2 90	10 2 90	10 2 90	10 2 90	10 2 90	9 3 67	9 3 67	5 23	7 09
Breaker engineer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Fan-fireman.....	12 3 40	12 3 40	12 3 40	12 3 40	12 3 40				
Lampman (depending upon number of lamps and skill of man).....	8 2 47 to 2 89	8 Same.	8 Samc.	8 Same.	8 Same.	8 3 16 to 3 66	8 Same.	4 65 to 5 22	6 58 to 7 08
Lampman (depending upon number of lamps and skill of man).....	12 2 47 to 3 40	12 Same.	12 Same.	12 Same.	12 Same.	11 3 16 to 4 19	11 Same.	5 83 to 6 43	7 61 to 8 14
Machinists.....	10 3 40 to 3 85	10 Same.	10 Same.	10 Same.	10 Same.	9 4 19 to 4 72	9 Same.		
Machinists helper.....	10 2 90	10 2 90	10 2 90	10 29 0	10 2 90	9 3 67	9 3 67	5 23	7 09
Ashman.....	10 2 50	10 2 50	10 2 50	10 2 50	10 2 50	9 3 16	9 3 16	4 65	6 58
Ashman.....	12 2 89	12 2 89	12 2 89	12 2 89	12 2 89	11 3 66	11 3 66		
Wiper (man).....	12 2 89	12 2 89	12 2 89	12 2 89	12 2 89	11 3 66	11 3 66		6 58
Coupler (man).....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Coupler (boy).....	10 1 65	10 1 65	10 1 65	10 1 65	10 1 65	9 2 13	9 2 13	3 48	4 40
Breaker oiler.....	11 2 89	11 2 89	11 2 89	11 2 89	11 2 89	10 3 66	10 3 66		6 71
Washer or tipple oiler.....	11 2 89	11 2 89	11 2 89	11 2 89	11 2 89	10 3 66	10 3 66		6 71
Breaker picker boss.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66	5 22	7 08
Timber framer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Timber sawyer.....	10 2 64	10 2 64	10 2 64	10 2 64	10 2 64	9 3 33	9 3 33	4 85	6 75
Box car shoveller.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66	5 22	7 08
Breaker platform boss.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66	5 22	7 08
Breaker platform men.....	10 2 60	10 2 60	10 2 60	10 2 60	10 2 60	9 3 28	9 3 28	4 79	6 70
Breaker screen men.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Rock bank men.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Dirt bank men.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58

[Hon. J. L. Coté.]

SCALE OF WAGES PAID IN THE PROVINCE DURING THE YEARS 1912 TO 1920—Con.

Occupation.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
								8 hr. day	8 hr. day
<i>Outside Wages.—Concl.</i>									
Finisher after box car loader.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
All other outdoor labor.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
<i>Bee Hive Coke Ovens</i>									
Levelling and drawing (½ ton charge) per oven.....	1 00	1 00	1 00	1 00	1 00	1 50	1 50		
Levelling and drawing (5 ton charge) per oven.....	0 80	0 80	0 80	0 80	0 80	1 05	1 05		
Loading into box or open cars (over 200 tons per month) per ton.....	0 17	0 17	0 17	0 17	0 17	0 23	0 23		
Loading into box or open cars (less than 200 tons per month) per ton.....	0 16	0 16	0 16	0 16	0 16	0 21	0 21		
Steam loc. engineer.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Motorman.....	10 3 18	10 3 18	10 3 18	10 3 18	10 3 18	9 3 93	9 3 93	5 53	7 37
Lorryman.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Plasterers.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
Carters and cleaners.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
All other labour.....	10 2 47	10 2 47	10 2 47	10 2 47	10 2 47	9 3 16	9 3 16	4 65	6 58
<i>Belgian Coke Ovens.</i>									
Ram engine man.....	10 3 40	10 3 40	10 3 40	10 3 40	10 3 40	9 4 19	9 4 19		7 61
Chargers.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66		7 08
Clayers.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66		7 08
Drawers.....	10 2 89	10 2 89	10 2 89	10 2 89	10 2 89	9 3 66	9 3 66		7 08
Loaders.....	10 2 60	10 2 60	10 2 60	10 2 60	10 2 60	9 3 28	9 3 28		6 70
<i>Briquette Plant.</i>									
Engineer.....	12 \$3 86	12 \$3 86	12 \$3 86	12 \$3 86	12 \$3 86	11 \$4 73	11 \$4 73		7 61
Briquetter.....	12 3 97	12 3 97	12 3 97	12 3 97	12 3 97	11 4 86	11 4 86		7 74
Briquetter's helper.....	12 3 40	12 3 40	12 3 40	12 3 40	12 3 40	11 4 19	11 4 19		
Tar melter.....	12 2 89	12 2 89	12 2 89	12 2 89	12 2 89	11 3 66	11 3 66		6 89
Labourers.....	12 2 89	12 2 89	12 2 89	12 2 89	12 2 89	11 3 66	11 3 66		6 89
Oiler.....									7 08
<i>Inside Wages.</i>									
				All inside	wages bas	ed on 8 hr.	day.		
Shotlighter.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Bratticeman.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Bratt. helper.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Timberman.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Timb. helper.....	3 75	3 75	3 75	3 75	3 75	3 47	3 47	5 00	6 89
Tracklayers.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08		7 50
Track. helper.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47		6 89
Motorman.....	3 05	3 05	3 05	3 05	3 05	3 79	3 79	5 37	7 21
Motor. helper.....	2 75	2 75	2 75	2 75	2 75	3 47		5 00	6 89
Loc. engineer.....	3 05	3 05	3 05	3 05	3 05	3 47	3 47	5 37	7 21
Loc. switchman.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Drivers.....	3 03	3 03	3 03	3 03	3 03	3 79	3 79	5 37	7 21
Drivers (wet places).....	3 30	3 30	3 30	3 30	3 30	4 08	4 08		7 50
Drivers (spike team).....	3 50	3 50	3 50	3 50	3 50	4 31	4 31	5 96	7 73
Couplers (men).....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Couplers (boys).....	1 65	1 65	1 65	1 65	1 65	2 13	2 13	3 48	4 40
Switch boys.....	1 37					1 76		3 05	4 03
	to 1 65	Same	Same	Same	Same	to 2 13	Same	3 48	to 4 40
Door boys.....	1 10	1 10	1 10	1 10	1 10	1 42	1 42	2 66	3 69
Rope Riders.....	3 03	3 03	3 03	3 03	3 03	3 79	3 79	5 37	7 21
Mail and tail rope riders.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Pushers.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Buckers.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Loaders.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Miners.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Miners (wet places).....	3 75	3 75	3 75	3 75	3 75	4 60	4 60		
Rock miners.....	3 75	3 75	3 75	3 75	3 75	4 60	4 60	6 29	8 02
Timber handlers.....	3 03	3 03	3 03	3 03	3 03	3 79	3 79	5 37	7 21
Labourers.....	2 75	2 75	2 75						
Cagers (slope and incline).....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Cagers, shaft.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Machine men.....	3 75	3 75	3 75	3 75	3 75	4 60	4 60		
Machine men's helper.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08		
Pumpmen.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Pumpmen (Dept. Nat. Res. C.P.R.).....	3 20	3 20	3 20	3 20	3 20	3 97	3 97	5 57	7 39
Hoistmen.....	3 03	Same	Same	Same	Same		Same	5 37	7 21
	to 3 30					to 4 08		to 5 70	to 7 50
Drivers (boys).....	1 65	Same	Same	Same	Same	2 13	Same	3 48	4 40
	to 2 75					to 3 47		to 5 00	to 5 74

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SCALE OF WAGES PAID IN THE PROVINCE DURING THE
YEARS 1912 TO 1920—*Concluded.*

Occupation.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
<i>Inside Wages—Concluded</i>									
Grippers.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Grippers (boys).....	1 65	Same	Same	Same	Same	3 47	Same	3 48	4 40
	to 1 75							to 5 00	to 5 74
Pipe fitters' helpers.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 00	6 89
Pit carriers.....	1 37	Same	Same	Same	Same	1 76	Same	3 05	4 03
	to 2 75					to 3 47		to 5 00	to 5 74
Clutchmen.....	3 30	3 30	3 30	3 30	3 30	4 08	4 08	5 70	7 50
Rollermen.....	2 75	2 75	2 75	2 75	2 75	3 47	3 47	5 60	6 89
Miners on contract, average.....	3 50	Same	Same	Same	Same				8 72
	to 6 00								to 10 63

Occupation.	1915.	1916.	1917.	1918.	1919.	1920.
<i>Outside Wages.</i>						
					8 hr. day.	8 hr. day.
Carpenters.....	10 \$3 85	10 \$3 85	9 \$4 72	9 \$4 72	\$6 43	\$8 14
Carpenter's helpers.....	10 2 90	10 2 90	9 3 67	9 3 67	5 23	7 09
Machine engineers.....	10 3 40	10 3 40	9 4 19	9 4 19	5 83	7 61
Firemen.....	10 3 37	10 3 37	11 4 72	11 4 72		
Water tender.....	12 3 25	10 3 25	11 4 02	11 4 02		6 71
Power house engineers.....			9 4 77	9 4 77		
Gas firemen.....			11 4 19	11 4 19		6 85
Stablemen.....			9 3 16	9 3 16	4 65	6 58
Motor truck driver.....					5 83	7 68
Teammen.....						6 51
<i>Inside Wages.</i>						
		All in	side wages	based on	8 hr. day.	
All other labour not classified.....	2 75	2 75	3 47	3 47	5 00	6 89
Gas boys.....			1 42	1 42	2 66	3 69
			to 2 13	to 2 13	to 3 48	to 4 40
Miners' laborers (wet places).....			3 88	3 88		
Machine men.....					6 29	
Machine men's helper.....					5 70	
Machine men (air).....						8 02
Machine man (elec.).....						9 42
Machine men's helper (air).....						7 50
Machine men's helper (elec.).....						7 62

In the years 1919 and 1920 the wages were based on an eight hour day.
Figures preceding the amount refer to number of hours worked per day.

The WITNESS: I have here the price of retail coal. We have in Edmonton, \$7.75 for lump, and stove, \$6.75. I have here the price-list of Winnipeg, showing their retail prices.

By Mr. Ross:

Q. Would you give us the average, so that it will go on record?—A. I am afraid it is not computed. We might be able to compute it, and I will give you the result of it. I have here a letter that might be informing to you; it is from the Fort William Elevator Co. of Winnipeg, to Mr. Stutchbury, our Trade Commissioner:

"Referring to your enquiry of 22nd March, we beg to submit the following information regarding our coal supply.

(1) We use from 2,000 to 2,500 tons per year, according to the amount of grain handled.

(2) This we purchase from the Drake Coal Co., and it is supplied from Pennsylvania.

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Cost laid down on our dock:

	per ton.
1913-14..	\$3 85
1915..	3 45
1916..	3 66
1917..	6 62
1918..	6 79
1919..	5 80
1920..	11 19

Account Exchange

Yours truly, etc."

By Mr. Ross:

Q. I want to get those retail prices in Winnipeg, and see what the people there are paying for coal as compared with the people of Ontario; just give me two or three figures.—A. This price list was effective June 11th, 1920. We have American Bituminous coal f.o.b. steam plants, Winnipeg, \$12.80 for slack; in blocks, \$16.25; to dealers at yards, \$14.75. Canadian bituminous—that would be Alberta coal—there is McGillivray, International, Bellevue, Hillcrest, and Greenhill, f.o.b. steam plants, Winnipeg, \$12.19 for lump; steam, \$10.59, mine run, \$10.82; slack, \$10.30. In blocks, Bellevue, \$13.75. Drumheller, lump \$14.00; and in blocks, \$15.00.

Q. Is that just about what the domestic consumer will have to pay?—A. Yes, I daresay that is the same.

By Mr. Chisholm:

Q. That includes haulage from the plant?—A. No, this block was delivered in houses—I daresay in the blocks where they lived. This, of course, is not the standard price for contracts.

By the Chairman:

Q. Can you tell us how those prices compare with present prices in Winnipeg?—A. I do not think it has changed very much.

By Mr. Cowan:

Q. It is substantially cheaper than the American coal in Winnipeg?—A. It is cheaper, yes. I have here the test that was made in the plants of the Alberta Government, the sample heating plants of the Government.

By Mr. Douglas:

Q. Where are they?—A. In the city of Winnipeg. These tests were made under the supervision of Mr. Oliver, Chief Engineer of the Alberta Government, J. R. McCall, Superintendent of Power Plants, city of Calgary, C. R. Robb, Professor of Mechanics and Engineering, University of Alberta, G. R. Pratt, Combustion Engineer, C.P.R. The type of boiler was B & W water tube, with B & W Chain Grate Stoker; the boiler was 250 h.p., builders' rating. Last year, if my information is correct, the Manitoba Government had contracted for making tests of coal, and we went to them, and they told us that if we could demonstrate that our coal was cheaper they would buy it, and they were good enough to let us use their plant for testing, and their engineers were present to check the test. We showed that the Lethbridge spiralized pea coal cost them just 66 cents per thousand pounds of evaporation; Newcastle nut slack, 75 cents; Michel, slack, 80 cents; Hillcrest, slack, 85 cents; and the Youghigheny.—that is the coal that they bought—cost them 87 cents.

[Hon. J. L. Coté.]

By Mr. Cowan:

Q. I think it is the fact that Alberta coal is superior to the American coal. Would it not be profitable to the Alberta mines if all the municipalities bought their coal on test? Regina buys all its coal that way, and will not buy it any other way, and I have their statement here?—A. Our Government have gone in for advertising, as you are aware, and here is the kind of advertising we have done; we have printed 34,000 copies of this large pamphlet (producing sample copy of pamphlet).

Q. Alberta is evidently succeeding, and if Nova Scotia people would follow a like course I think they would find they would succeed as well.—A. Here is a letter that we received,—this is the sample of about twenty that I have here—this is in answer to a letter we sent to all big dealers in steam coal, asking them for practical suggestions as to how to introduce our coal:—

“Replying to your favour of the 22nd instant, regarding coal, I might state that we do not use a very large quantity in our plant being only used for heating purposes. We use about 250 tons per year, ordinary mine run and for the past few years have only used Canadian coal which we have found very satisfactory.

“We are at a loss for any practical suggestion to eliminate the excessive use of American coal in this province, which seems to us to be more of a habit we have got into than any other cause, and like all other bad habits, it will probably require some time and effort to overcome.”

We have about 20 letters of that description, showing that the coal is satisfactory. We have another letter which I have had photographed, as follows:—

“The Government of the Province of Alberta is anxious to draw the attention of Western Business men to the economic significance of the figures covering the importation of American coal into Manitoba, and to make the suggestion that a double benefit will accrue from a general effort on the part of coal consumers to curtail this importation, by the use of Canadian coal.

“Approximately eighteen million dollars was paid last year by the people of Manitoba for American coal, to which must be added not less than two million dollars more for exchange.

“This money could all be retained in Canada by the exclusive use of Canadian coal. Such action would materially reduce our trade balance, and hence tend to reduce the high exchange rate. It would provide more and steadier employment in the western mines and reduce industrial unrest. The eighteen million dollars would not merely remain in Canada, but would be spent for production in Alberta, to flow back through the trade channels of the west, and increase the business of Manitoba manufacturing, wholesale, and productive industries. It would develop an important Canadian resource and save to this country a truly remarkable sum now being irretrievably lost.

“Of the world's unmined reserves of known coal 15 per cent lies in Alberta. The Alberta field contains 70 per cent of the coal reserves of the British Empire. Although the mines now actually in operation in Alberta have a working capacity, with present equipment, of 12,000,000 tons per year, only 7,000,000 tons were mined last year. Continuous production is not possible with this lack of orders, and this condition adds materially to the operating cost per ton.

“There is a coal mined in Alberta which will economically fit any requirement.

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"I would like to receive a frank expression of opinion from you, and any suggestion whereby concerted action to reduce this costly importation may be brought about.

'The Government would be interested in knowing how much coal you used last year and where it came from and if you care to give us this information, it will be appreciated and held in confidence.

"Thanking you for your courtesy in this matter.

I am" etc.

By Mr. Cowan:

Q. You speak of this Trade Commissioner; is it his particular duty in Winnipeg to boost Alberta coal?—A. Yes, and I had an engineer.

Q. How long have you had him there?—A. Last year; he does not stay all the time there. We have also a combustion engineer, who is putting out these cards and distributing them; he has an office where he has a steam outfit, and where he shows them how to use the Alberta coal. A great many of them do not know how to use the coal.

Q. And your Government keeps this man there just to demonstrate to the Manitoba people?—A. To demonstrate to the Manitoba people what we can do with the Alberta coal.

Q. And what has been the result of those efforts on the part of your Government?—A. We feel that last year we have introduced about 250,000 tons of coal more than we would otherwise.

By Mr. Keefer:

Q. I suppose you have also increased the efficiency of the plants?—A. Yes.

Q. And thereby conserved the coal consumption?—A. Yes.

By Mr. Cowan:

Q. Have you found it necessary to get them to change their grates?—A. No.

Q. They can use the cheaper coal with the plants they have?—A. Yes, of course, when they choose the coal that will be more suitable for their plants, out of the several different grades of coal that we have.

By Mr. Douglas:

Q. Has the Alberta Government representatives anywhere else besides the one mentioned at Winnipeg?—A. No. That is the only place where we come in contact with American coal, and we have got to hold the American coal away. One field is competing with another field.

By Mr. Cowan:

Q. We have imported a great deal of American coal into Regina, very largely anthracite comes in there, hundreds of thousands of tons of it; but what we find, unfortunately, is that just as the price of the American anthracite rises, the operators in Alberta raise their price; that is, the American anthracite seems to be a barometer that fixed the price for Alberta; why should that be? It is a question whether it is more profitable to use the American coal or the Canadian?—A. Our cost has increased a great deal since 1912—the cost of producing—labour and machinery. Most of the machines that are used in mines are imported. When I was connected with the Jasper Park collieries we had a contract in 1912 with the Grand Trunk for \$2.65 a ton, and now the same people have got a contract for \$5.50, I think; I am not quite sure about those figures; and I think they are operating at a loss.

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By Mr. Douglas:

Q. Has there been any evidence in Alberta of profiteering?—A. No; there might have been, but I think most of them are losing.

By Mr. Cowan:

Q. There are two or three hundred companies there; would it be possible to have a combine in Alberta?—A. No, I doubt it. I do not think so, because my information, from what I can see, is that one man here and there might make some profit, but most of them are not making very much profit. Probably you could get this information far better from Mr. Young, of the Western Operators, than I can give it.

Q. I am afraid he is going to get into a lot of trouble when we get hold of him?—A. Oh, no.

The WITNESS: I have a report that I would like to lay before your Committee or several copies in fact that I have of the Coal Mining Industry Commission that the province of Alberta appointed over two years ago, and they make the following report of sub-leasing; "sub-leasing of coal leases issued by the Federal Government has the effect of unnecessarily increasing the cost of coal to the consumer."

"Existing freight rates militate against the marketing of Alberta coal in Manitoba and the United States."

"Mining equipment and power, under the present system are too expensive."

"Large quantities of coal have been and are being lost through improper mining methods as well as through cessations of work."

"In many mining camps the hospital facilities are inadequate."

The recommendations are:—

- (a) That employees be required to use every effort to see that all coal is mined properly and free from impurities, so that the best product will be obtained from the working face.
 - (b) That employers be required to see that all coal is properly prepared and graded before shipment.
 - (c) That railway cars are properly cleaned before being loaded.
 - (d) That better facilities for more prompt dispatch of cars from the mines to the point of consumption be obtained.
 - (e) That all invoices for coal sold, either by owners or dealers, shall have inserted on them the size and kind of screen over or through which such coal passes and the name of the mine from which the coal is supplied.
 - (f) That in order to get correct rates better provision be made for the taring of railway cars.
 - (g) That steps be taken to establish testing stations in different provinces, particularly Manitoba so that the buying public may be given information as to the uses and values of different coals.
 - (h) That a complete system of advertising Alberta coal should be undertaken.
 - (i) That attention be given to the question of storage of coal by both consumer and dealer.
- (2) That a permanent commission be appointed and given power by legislation to make working agreements and provide for the settlement of disputes.
 - (3) That living and housing conditions and matters pertaining to health and sanitation be dealt with by the said commission.

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- (4) That the said commission co-operate with the Department of Education with a view to seeing that satisfactory educational facilities are provided for all children of school age.
- (5) That before mining operations are commenced, the question of the advisability of opening a mine in any particular field as well as the question as to the amount of capital required to open in that field be referred to and approved by the said Commission and that the administration of the regulation passed by Order in Council P.C. 2303, by the Federal Government a copy of which is hereto attached, be vested in the said Commission."

I am not prepared to endorse all these recommendations.

By Mr. Cowan:

Q. Do you wish to discuss the question or would you prefer to leave the question to your engineers?—A. I would prefer to leave it to the engineers. Some coal storage should be in Winnipeg in my point of view. I may come again and be examined in this point.

By Mr. Douglas:

Q. The Government has no storage yards?—A. No sir, not yet, but I believe from what I see that the Americans have got storage in every city, or close to it, for their coal, say Fort William, and Mr. Caye was telling you that in Montreal they had large facilities for storage. The Nova Scotia coal companies have got facilities in Montreal; the American coal companies.

Q. Is it the duty of your engineer in Winnipeg to test the different coals?—A. No, that is where the storage would come in.

Mr. COWAN: Regina city does not buy any coal at all except on test, and we find it very profitable.—A. I have here a copy of the annual report of the scientific institute of Alberta where we have started to test our coal. Our geology of course was all right some years ago, but as our field opened we felt we had not sufficient knowledge in the geological sense for our coal field, and the Alberta Government has a staff this year with Dr. Allan in charge and three fourth-year students, where he is going to begin to geologize the field. Of course, the geology was done by the Dominion Government in a kind of exploratory way but we have passed that stage to-day and we want more information about it.

By Mr. Blair:

Q. Is that examination being made with a view to locating the coal?—A. No. It is geology because there are several seams of coal and the geology must be studied in detail in order to know one seam the moment you strike it and in that way we figure out we will save a great deal of capital. For instance a man will sink a shaft expecting to strike a seam, and he does not strike it or he strikes it at different levels. Probably the seam that he expected to strike has been wiped out for some reason or other and he is there and he does not know where he is.

By Mr. Cowan:

Q. He wasted all his money?—A. Yes. And the grading of coal is started under Prof. Pitcher in the University of Alberta and he will be able to give his evidence on that but we have the first report and I can leave you a few of these reports if you wish them.

By Mr. Keefer:

Q. The men that you have in the field are Provincial Government men?—A. Yes, all with the Provincial Government.

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Q. It is being done with the purpose of developing the coal business in the province?—A. Yes.

Q. Do the coal dealers get the benefit of that?—A. Yes.

Q. They find it is good business for them?—A. They pay a tax of 5 cents a ton.

Q. When the coal is taken over privately, is it leased in Alberta?—A. This is under the Dominion Government. The Dominion Government leases the land at \$1 an acre and they have it now. About fifteen years ago I think they were selling in fee simply at about \$10 an acre.

Q. By this policy you have increased your pay-roll in Alberta up to \$19,000,000 this last year?—A. Yes the Dominion Government gets also 10 cents a ton.

Q. As a royalty?—A. Yes, and \$1 an acre on their leased land.

Q. As a province you found it advisable to push your coal?—A. Yes.

Q. Do you know your freight rates are higher coming East than going West?—A. Yes.

Q. On what material?—A. On coal.

Q. I believe they are higher than on lumber and say one or two other articles?—A. There is not enough about freight rates to give you any information on that. I understand our freight rates from Prince Rupert to the coast are lower than from Edmonton to Winnipeg.

Q. Of course the grain cars coming East have to come back light, and when you are transporting additionally you are only accentuating that situation?—A. Yes.

The CHAIRMAN: It is five minutes to one o'clock. Is it the wish of the Committee to adjourn at one o'clock or to continue until Mr. Cote finishes his statement.

Mr. KEEFER: Let him finish if it does not take too long.—A. It won't take me long now.

Q. How long will it take?—A. Just a few minutes more.

The CHAIRMAN: Mr. Cote will be available any day for a few days,

Mr. MCKENZIE: Perhaps we had better let him finish his statement now.

WITNESS: With regard to our extension of market, our trade commissioner has been to Prince Rupert and we have applied for facilities for handling our coal. My information is that it costs about \$1.25 to handle the coal in Prince Rupert. Some of the coal is shipped to the smelting companies, and we wanted bunkering facilities.

By Mr. Chisholm:

Q. What is your freight rate to Prince Rupert?—A. The freight rates are about $\frac{1}{4}$ of a cent per ton mile and we have communicated with Mr. Wilde, the general manager of the Canadian National, who seems to have recommended it very strongly, but it was turned down by the general management of the road, and we are now trying to organize a company. They gave us a lease of a wharf there and we expect to organize a company where we can handle our coal there for about 30 or 40 cents. I understand the harbour commissioners of Vancouver have applied to the Dominion Government to get a grant also for bunkering facilities. We feel that in Prince Rupert we could dispose of about 100,000 tons of coal to begin with, but of course as soon as you get there you have to contend with the Jones Shipping Bill, because we would ship right to Alaska.

As you are aware, we have engaged Mr. Stansfield, who is in Ottawa employed by this Government, and in this report you will see that the problem of Mr. Stansfield is to test for fuel. He is going to start to test this year and there is also a map here. I think that is all I have at the present time.

By Mr. Cowan:

Q. You are carrying a lot of marketing products?—A. Yes.

[Hon. J. L. Côté.]

Q. Has anything suggested itself to your mind that the Dominion Government could do to assist you in the policy you are trying to carry out?—A. Yes. There is quite a lot.

Q. Can you indicate it to us to-day or some other time so that we would have it in as concrete form as possible?—A. Yes, I could probably give you the suggestions that I think necessary, and I think that would help us.

Q. Are you taking any steps at all to require a better standard? You have the coal?—A. You have most of this, it is quite true, but it is exploited by the American coal dealers, we think, in this way, that we have got the poorest grade of coal, and a man that wants Canadian grade of coal they say, "We handle Canadian coal." He says, "Yes?" He makes a failure, he comes back and he says, "That is a sample of Alberta coal."

Q. I understand the Americans are carrying on an aggressive policy?—A. They are this year.

Q. Did you pay any attention to the grade of American coal that is coming in?—A. Not yet.

Q. It is about the dirtiest stuff you could get?—A. I am sending a man to Fort William as soon as navigation opens. I think they are dumping on us, sending consignments in expectation of selling at cheap rates and we will try and see whether they do or not. I don't know whether we will get the evidence.

Q. There is no Governmental supervision over the coal shipped out of the mines in Alberta?—A. We cannot do it. It is a Governmental matter, being inter-provincial trade.

Q. I am satisfied if more attention was paid at the mine mouth and a little better supervision given to it, you would sell a great deal more than you are now doing.

By Mr. Douglas:

Q. You have mine inspectors?—A. It is only for the protection of life. We have no inspector as to the quality of the coal.

By Mr. Cowan:

Q. Does the fact that the natural resources should have been handed over to the Federal Government make it a Federal matter?—A. The inspection of coal should be a Federal matter just as you have an inspection of grain. You have in the grain elevators men who inspect grain and classify it. It should be the same as if you had a large storage place.

Q. Supposing this Government was to pass an Act providing for this supervision, requiring inspection, would there likely be any objection from Alberta to this action?—A. I think during the war the fuel controller had the power to do it.

Q. But it has not been enforced?—A. It has not been enforced, at least not that I know of.

The CHAIRMAN: Are you ready for adjournment? It is after one o'clock.

By Mr. Douglas:

Q. The Committee wants the operators, do they? The Coal Operators' Association, I think you call it. That is the Coal Operators of Alberta?—A. Yes.

Q. Do they meet and fix prices?—A. No, they don't. I don't think they do; they might but I don't think it is to my knowledge.

The CHAIRMAN: Thank you. We might take advantage of your presence to call you again. We will continue with the gentlemen from Alberta to-morrow morning. We have Mr. Dick, of the Dominion Coal Company, who has been called for to-morrow morning, and we will try to get through with him to-morrow.

Witness retired.

The Committee adjourned.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

WEDNESDAY, April 20, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Let the Committee come to order. The Committee will remember that we had representatives of the Alberta Government before us yesterday, and we heard the Provincial Secretary, Hon. Mr. Coté. We have Professor Pitcher, of the Alberta University, and Mr. Young of the coal operators of Alberta to be heard to-day. Call Professor Pitcher first.

Professor N. C. PITCHER called, sworn and examined.

By the Chairman:

Q. What is your official position, Professor?—A. I am Professor of Mining, University of Alberta, and Consulting Mining Engineer.

Q. What positions have you held in connection with the fuel industry prior to your acceptance of the university position?—A. I was ten years with the Dominion Coal Company, in Glace Bay, and ten years with the C.P.R.; the present North American Collieries, Alberta.

Q. What position had you with the C. P. R.?—A. I was Construction Engineer, and with the North American Collieries, general manager.

Q. Now, Professor, we would be glad to hear from you any statement that you are prepared to give on matters of interest in this inquiry.—A. I have no formal written statement to present, but I wanted to go over the work that the Minister, Mr. Coté, presented to you yesterday, to fix a little bit the geology of Alberta in your mind, as our problems in Alberta are very much more complex on account of the variations in the quality of our coal from what they are in any of the other provinces, but if you will pardon me I will speak a little bit on elementary chemistry first. This is not going to be scientific, it is quite popular, and I don't know whether it should go into your proceedings as it may be criticized by a chemist.

In the main it is correct, but it is not scientifically correct. My talk might be criticised, part of this, in the analysis of coal. In analysing coal, called proximate analysis, coal is generally analysed for moisture, volatile combustion, fixed carbon and ash. Now the moisture in this coal is not the moisture that would appear in a piece of coal, but it is contained in the coal. This moisture is driven off your coal in your analysis at practically boiling water. Volatile combustibles comprise various constituents. Your fixed carbon is the remaining carbon contained in the ash. Following that we know that the general accepted classifications of coal in the lowest form is lignite, next bituminous, and next, generally speaking, is an anthracite. The classification of coal is a very difficult subject and everybody who knows anything about classification of coal has a different idea from another man but generally speaking between lignite and bituminous the distinction is in the moisture content of your coal.

Take, for instance, Souris coal, as a typical lignite, its content will be about 35 per cent moisture. Its volatile may be about 30; its fixed carbon around 30, and its ash remains probably about 6.

[Professor N. C. Pitcher.]

By Mr. Douglas:

Q. Sulphur—A. None in our Western coal to speak of, a fraction, probably one half or one per cent in any of the Western coals. The next grade to that—that is a typical lignite, a typical bituminous coal, we will take the Hillcrest—we will have about one per cent moisture, 25 to 28 per cent volatile combustible with 58 to 60 per cent fixed carbon, the remainder ash. In between those two you can get coals of all varieties of moisture in Alberta, but where to draw the line between the lignite and bituminous is very difficult, insofar as in the Tofield field we have a 30 per cent moisture coal. That obviously should be called a lignite as we have said Souris is a lignite, next bituminous, and next, generally speaking, is an anthracite. The Tofield, but it is obviously lignite. 23 per cent in Edmonton. There are several grades in between districts that are not well known grading down to Drumheller, 16 per cent moisture. From there you go down to Tabor, 11 per cent; Lethbridge, 8 per cent moisture; Coal Branch, 5 per cent moisture. We could find in all these districts we have in Alberta a coal which would vary only by about one per cent moisture. The American classification would call that a bituminous coal.

Yesterday your Committee was asking the difference between steam coal and domestic coals. For general purposes the coals in these districts, from 30 per cent carbon moisture to the 8 per cent of the Lethbridge moisture are called domestic coals. In fact, the American classification of a great many of those coals would be "sub-bituminous"

Now, our coals are grouped into different geological formations that are found there. The one general age is divided into three series, the Edmonton series, the Bellay River series, and under that again is the Kootenay series. This is the line of the Rocky Mountains (indicating on map) which when they were shoved up onto this strata they gave out tremendous pressure and the moisture was driven off the coals in this area. The nearer they were to the hills the more moisture, with the result that in any field you can start here and gradually work eastward. You will find up there (indicating on map) bituminous coals, and up further to the west semi-anthracite, which probably has its equivalent here (indicating on map.) Going to the east you go into 16 per cent bituminous coal, and down here to 30 (indicating on map), down to Tofield 30. Your moisture increases the further east you go on the upthrust of the Rocky Mountains. You will understand why it is very hard to tell you just exactly any dividing line between what we consider our domestic coals and our steam coals. That is as far as I was going to make a statement. You had asked Mr. Côté a few questions yesterday, which he had referred to, and probably I can answer some of them.

The anthracite is in this district (indicating on map.) It produces a coal commonly called anthracite. To all intents and purposes it is an anthracite, anthracitic coal. Just east of this is Canmore, which is called a lean bituminous, anthracitic coal. In High River there is a pit they opened up of similar coal to Canmore, and in the Smoky River District over which there was so much trouble we have an anthracite coal. It is very reasonable to believe that throughout this district, if it were properly prospected, that coal of a very high grade, steam coal would be developed, and possibly it would be a very good domestic coal. The only objection to the domestic is the upthrust of the Rocky Mountains, and instead of being lumpy coal it is generally pretty fine. But as these coal are non-coking coals, the financing of it makes it rather awkward for the domestic consumer to use it because of the sparks, unless he gets the screened products.

In the case of Canmore it is mixed with briquettes and it makes one of their best fuels. There is no railway up in the district of Smoky River, and I have to go on reports of prospectors. From what we were led to believe, knowing the geology of the country, I think it is very fine coal.

Mr. COWAN: There is not any question about anthracite now.

[Professor N. C. Pitcher.]

By the Chairman:

Q. I would like to ask as to the mine in course of development known as the Pat Burns on Sheep Creek. How far have they proceeded with the development? To what depth, to get the coal on the market?—A. They have forty miles of railway. I think the charter has been renewed twice in the House. It is about 40 miles of railway, quite an extensive construction. They have spent two or three years in serious prospecting.

Q. Have you any idea as to the quantity of coal there?—A. No, we will have within the next couple of years. The Alberta Government is financing a very extensive campaign of geological work in Alberta. The geological work is supposed to be done by the Federal authorities.

Q. They lost their men this year?—A. Alberta will have no parties in from the Federal Government this year, so the provincial government have put Dr. Allen in charge of their Geological Survey. He is putting one party in there this summer. He is putting one party in the Drumheller field, the geology of which has never been gone over, and another party is on the Coal Branch. This is done with the object first of determining what there is in that country before rushing in there and losing money.

Q. The Sheep Creek has been evidently thoroughly prospected by them?—A. According to their reports, which Dr. Allen gave last year, but he does not consider that work has gone nearly far enough to give as complete information to the public as they should have. It was given only about a week last year. He expects to put a party in there for five months this year.

Q. As American anthracite is largely short, we have to displace those orders, and as the anthracite we are now getting is merely from the boggy part of Canmore, and as this is the only anthracite we can get, would it be good policy on the part of your Government to hasten the work of that Pat Burns mine?—A. Possibly so. We in Alberta think that there are other ways of getting after Mr. Anthracite, and the provincial government has financed the university in a scheme of research work. I might have gone further into that in describing the chemical analysis of coal. Take Tofield coal, you remove that moisture and you have practically anthracite, remove the moisture and some of the volatile and you have a dust left.

By Mr. Keefer:

Q. Do you get a lot of by-products?—A. Yes.

Q. Would not that pay for it?—A. That is what the Dominion authorities are doing, helping to finance the scheme in Estevan. We think we could produce these briquettes and get by-products more advantageously than they can in that camp. Our programme of research work covers carbonizing, briquetting and pulverizing coal, used as pulverized fuel.

By the Chairman:

Q. Before you pass from the different coal fields I think many of us have been led to believe that the Brewer Lake district produces an excellent quality of coal?—A. Brewer Lake mine is in Brewer Lake district.

Q. There is a large district in which there are a number of mines operating, and which I had been led to understand had been producing an excellent quality of coal, I mean equal to an American anthracite. A. It is a coke, or bituminous coal. This is the Mountain Park and Cadman District (indicating on map). This is the mine of Mackenzie & Mann, the C.N.R., and this is the district of Canmore, and this is the Crow's Nest Pass District (indicating on map). Those coals, with the exception of their local variation, should have no ash, or practically the same quality. The Brewer Lake coal is the same quality as the Jasper Park, and is the same as Cadman and the Mountain Park and so on.

[Professor N. C. Pitcher.]

By Mr. Keefer:

Q. What largely interests us in the West, who are not adjacent to this coal, is the ability to supply us with it. Have you given that any thought?—A. You give us the order. We will supply it.

Q. The distance is what we have largely to overcome. Have you given that any thought?—A. Only in conjunction with Mr. Cote. Mr. Cote has gone into that very thoroughly.

Q. Speaking of the by-products, in the treatment of your coal, could not that be applied equally, say to lignite deposits that lie nearer to Winnipeg?—A. It could be applied to any deposits.

Q. Getting T.N.T. and all those products out of it?—A. That applies to their bituminous coals largely.

Q. In the lignite you could get a residuum of anthracite?—A. Bearing carbon and ash.

Q. So that these deposits might become very useful?—A. Yes.

Q. How far away is that from Winnipeg?—A. It is North Portal.

Q. Roughly speaking in mileage?—A. I don't know what the mileage is.

Mr. COWAN: It is about 350 miles.

By the Chairman:

Q. You were just going on to tell us about the briquetting and carbonizing.

By Mr. Keefer:

Q. 350 miles from where?

Mr. COWAN: From Estevan to Winnipeg.

Q. I would like while we are at this anthracite, if you have anthracite in Alberta, as we have reason to believe you have, would it not be much easier for the Alberta Government through the machinery they have already installed to capture the Manitoba and Eastern Saskatchewan market by the use of anthracite than by the use of other coals?—A. Possibly so. But this whole scheme is financed by a tax of 5 cents a ton on all mines in the provinces, and I don't think it would be good politics for the government to operate on a competitive scheme or to operate collieries where we have millions of dollars invested.

Q. As soon as this Pat Burns Company comes in the field would they be included in that 5 cents?—A. Yes.

Q. That is putting a brake upon development by their coming in?—A. Pat Burns is having his geology traced out to-day for that five cents. For every five cents he expends in that he will have a dollar's worth of information.

Q. Western Ontario, Eastern and Southern Saskatchewan, and American anthracite is what they have to compete with? The best product to treat in would be anthracite. It would be my idea to get those anthracite mines developed as soon as you go to capture that market.—A. That would be private enterprise. You would not advocate Government control of mines?

Q. No, but I would like to see your Government exert every possible pressure to get that mine developed.—A. I think they have been doing all they can as far as that particular area goes, that is, renewing the charter, assisting in this prospecting, and in that geological work. As I started to say, if it is easier or more rapid or more feasible to prepare some of our lignites to an anthracite form, that is another way of getting at it, and it is covered by the series of experiments we propose to adopt and which appear to us to be quite feasible.

The CHAIRMAN: If we are going to make any progress in the committee at all I think we must insist on the plan we have tried to adopt. Let the witness make his statement as to what he wishes to tell us, and we can question him on it afterwards. I don't see we can make any progress unless we allow him to continue with his

[Professor N. C. Pitcher.]

story. Most of these points that we are questioning him on now, no doubt will be brought up in his evidence. If that is the wish of the committee we will endeavour to adhere to that. If it is not the wish of the committee we will have to adopt some other policy.

Mr. McKENZIE: I vote for a unanimous decision on that suggestion.

WITNESS: One of the questions asked Hon. Mr. Coté was, could not coal be produced cheaper in Alberta with a combination of all the mines. It is quite obvious it could. The unfortunate thing is there is a sucker born every minute, and he goes into the coal mines in Alberta. If a combination was made in our district, which is a typical district of that nature, and it operated successfully, of the 30 mines operating in that district, there are three, possibly four mines, could work steadily and reduce their cost of material, but the moment that company got in good operating shape there would be another 30 mines going in again. The main trouble no doubt is that Alberta turns out too much coal. That is why it costs you so much. If you had less coal you would get cheaper coal. You can start a gopher hole anywhere. The report of the Coal Commission of Canada, laid on your table, recommended that a commission be appointed in Alberta, which would sit, and anybody desiring to open a mine would have to appear before them and show cause; otherwise no mines would be allowed to be opened. That in my opinion would be a partial solution. Take the Drumheller district again, for example. Some of those mines would die a natural death, and if the Commission refused to allow any other mines to operate the remaining mines could make some money and be able to pass along some of their profits to the consumer. Not very long ago I had occasion to go over the accounts of a small colliery which I know if they had operated steadily throughout the year would have operated at \$1.25 a ton less. It is a question in Alberta of steady work. Steady work will reduce materially the operating costs. The question of cleanliness of the coal was brought up and the Alberta operator will tell you that his coal during the war was not by any means what it should have been. There are many reasons for that. The Alberta operator is placed in the unfortunate position of operating under the dictation of the Director of Coal Operations and under the dictation of the miners. The men at that time were absolutely out of hand; they would turn out any sort of product they cared to. It was impossible to discipline the men. If a man were fired they turned out dirty coal, and the consequence was that they were obliged to reinstate him. That existed for two years and the men have the habit now. They could not pick out all the dirt that was being sent out.

I think the same thing obtained in the States. I saw a statement in the Black Diamond in Alberta in which one of the large operators pointed out that the increase in their district, which was very material, was practically made up of the increase of foreign material that the miners were putting in their coal.

By Mr. Keefer:

Q. So far as anthracite is concerned, you have already obtained through this progressive and wise policy of the Government backing you up, a Winnipeg market largely.—A. We think we have got the domestic market.

Q. For Winnipeg?—A. For Winnipeg.

Q. The action of your province is very outstanding. Apparently now you have \$19,000,000 per annum spent in coal mining wages through the policy of propaganda you pursued.—A. Not all of that.

Q. That is the total payroll to-day. You have increased it to that amount.—A. The bituminous phase of the question is what you have not yet acquired in so far as your market is concerned. How far East do you come with your bituminous coal?—A. Railway coal comes as far as two divisions east in Ontario.

Q. For railways?—A. Not entirely. But railway coal came that far. It was on the C.N.

[Professor N. C. Pitcher.]

Q. Not on the C.N. I thought they took the Pennsylvania Coal up by water?—
A. No. Mr. Brown their Superintendent, told me they are using roughly two divisions in Ontario.

Q. 250 miles east of Winnipeg?—A. East of Manitoba.

By Mr. Cowan:

Q. It is nearly to Fort William?—A. Pretty nearly.

By Mr. Keefer:

Q. We had it here that the coal that comes by water in a statement of a division east of Winnipeg, and some times it coals engines from Winnipeg to the first divisional point West.—A. Some of it is.

Q. You have had experience before you went West, in Nova Scotia?—A. Yes.

Q. You had for how many years?—A. Ten years.

Q. You are pretty familiar with that field.—A. Yes, I know that field.

Q. I would like you to give us any information about that because that is a visible source of supply for bituminous coal. How long was it since you were in Nova Scotia?—A. I left there in 1909.

Q. In what way, an operator?—A. No, I was construction engineer.

By the Chairman:

Q. Are you through with your statement?

Mr. KEEFER: Yes, he said he was.

The CHAIRMAN: Don't you think it would be fair to confine our examination to matters pertaining to Alberta?

Mr. KEEFER: My gracious, no. If he can tell us anything about Nova Scotia ten years ago, as well as Alberta, let us have it.

By Mr. Blair:

Q. Regarding a mine shown on the map at Minburn on the Canadian Northern, the most north-easterly spot there, has there been much development out there?—A. No, there is very little from that mine.

Q. Do you know anything particularly of it?—A. It is in the Bellay River. That would tend to be something of the same quality as the Galt and Imperial coal. I don't know anything about that question.

Q. About the cost of mining, have you any data on that?—A. In Alberta.

Q. Yes.—A. Our wage schedule in Alberta has changed considerably. These are some of the few characteristics rates to show you how wages have increased: in 1915, the surface men, the lowest class of labourer, men who were shovelling around the yards and cleaning up, were getting 24.7 an hour. In 1920, these same men were getting 86 cents an hour. That is an increase of 233 per cent since 1915 to 1920.

Q. Men doing surface work?—A. It is just roustabout work. Men who were picked up off the railway gangs. People would could not speak a great deal of English, in fact, could not read and write their own language. The lowest class of labour underground ran up from 27½ cents in 1915 to around 92 cents an hour in 1920. That class of labour was the same class of labour as I have spoken of in the surface, in our other work underground. That included underground, the time required to get to their work from the surface. They were paid for that until they got to their work and also coming home; an average of six hours from surface to surface, so actually instead of being 90 cents they were getting over a dollar an hour. The most skilful class, the contract men, are averaging for eight hours, from surface to surface, probably around \$10 a day.

[Professor N. C. Pitcher.]

By Mr. Cowan:

Q. That is the real miner?—A. Yes, that is the miner. Roughly speaking, in your mine one-third of your men work on the surface. One-third of the men are working underground, in what they call shift work, ventilation, road-cleaning, and so on, and one-third of your men are on contract. They dig the coal and load the coal. I think in Nova Scotia they also have their drivers on contract. In Alberta they don't.

Q. Do you know whether they pay as high wages in Alberta as in Nova Scotia? Have you any comparison?—A. I think I am right in saying the wages in Alberta are 30 per cent above those in Nova Scotia.

Q. In your experience is it as difficult to mine in Alberta as in Nova Scotia?—A. My experience in Nova Scotia is an experience of ten years ago. Since then their conditions have changed materially. Now they have a lot of submarine work. I know nothing about that work. In Alberta we have conditions they have not there. Though we have not their water conditions we have gas conditions much more severe than in Cape Breton. In Alberta, and in B.C., the Fernie Mine, for instance, has conditions of gas. The general manager tells me from data he has collected they are the gasiest mines in the world, and that means expensive mining.

Q. What price does your coal sell for in Alberta at the pit mouth?—A. Bituminous \$5.27 a ton to \$5.30.

Q. It is away below the Nova Scotia price notwithstanding you are paying higher wages?—A. I don't know their prices. Our labour has increased. When I gave you those rates of 233 per cent, those were the biggest increases I quoted. The average increase was 202 per cent over the entire pay-rolls.

By Mr. Douglas:

Q. When you are speaking of the sales do you take into consideration all the coal or are you dealing with railway contracts?—A. In the bituminous and the railway coal is probably three-quarters of the entire output. I think Fernie is three-quarters. The entire output would be railway coal and coke.

By Mr. Keefer:

Q. You have spoken of water, submarine and gas. Are there any other differences between mining in Nova Scotia and the Western coal?—A. That is rather an unfair question. Some of the mines in Nova Scotia are very deep. In the Dominion Coal Company their deepest mine is 900 feet. I have operated a mine in Lethbridge at 600, but to offset that they have much better conditions in roofing than we have in Alberta. The Nova Scotia mines are in the carboniferous age. Our, as I have explained, are not in the natural coal age. If it were not for the upthrust of the mountains we could not have any coal in Alberta. We would have good grade of peat. When the mountains were thrown up the rocks were not. In the Lethbridge District the roofing conditions are so bad that for every ton of coal they take out they have to put in one and one-half sticks of timber. They have to put in pit props.

Q. What are pit props worth?—A. I have not bought any for a year and a half. I think a pit prop is worth probably $3\frac{1}{2}$ cents landed.

By Mr. Ross:

Q. Take non-submarine mining in Nova Scotia, are the difficulties greater in Alberta than in Nova Scotia?—A. Personally I would much rather operate a Cape Breton mine than I would an average Alberta mine.

By Mr. Keefer:

Q. Give us the reason?—A. There are mostly better roofing conditions. We are full of faults and distortions and washouts in our coal. They have better roofing conditions and more regular coal. We have a fryable pavement and a fryable roof. We don't have their water conditions, but we have a heavy gas.

[Professor N. C. Pitcher.]

Q. Your knowledge in Nova Scotia was confined to mining other than submarine?
—A. My underground experience was in repair work on machinery and such work as that.

Q. Are there any other conditions that are comparable between the two areas of mining? You have spoken of wages, you have spoken of roofing, of water, gas. What about transportation to the railways, or how far away are they from the means of shipping?—A. In Cape Breton?

Q. In both cases, roughly speaking.—A. In Cape Breton the Dominion Coal Company operate their own lines.

Q. We want a general survey of the thing?—A. They are within a very few miles of it. They are perhaps at waterfront.

Q. Approximately what distance?—A. Probably 30 miles.

Q. Compare that with your western coal products?—A. We have no water routes within 1,200 miles.

Q. Of your rail?—A. Our rail from most of the districts—Winnipeg is between 800 and 900 miles.

Q. How far from the lines of the railway are your mines?—A. They are all connected with spurs.

Q. What about the ability to get timber, etc.?—A. That varies tremendously in Alberta.

By Mr. Ross:

Q. We in Ontario are trying to get at something practicable. We have got to get our coal either from the States or from Nova Scotia or Alberta. Speaking of the central part of Ontario you have had experience in both countries. Now knowing the class of mines and something about the transportation and so on, which area is more likely to be able to supply Ontario people with coals, Alberta or Nova Scotia, at a fair price?—A. You mean central Ontario. That is a natural Nova Scotia market, no doubt. Alberta could not touch that district.

By Mr. Keefer:

Q. You don't contemplate coming much past the head of the Lakes?—A. Not except in case of emergency. If you were laying out a programme of a case of emergency where the American supply was cut off, we could meet you further East.

Q. So you think it will never be practicable for Ontario to get bituminous coal from Alberta?—A. I cannot see it. I don't think it is commercially right.

Q. Do you find your local market in the West steadily growing?—A. Steadily growing, but badly fluctuating. The general trend of the market is indicated in this diagram.

Q. You produce more than your local demand, don't you?—A. Yes, we consume only a fraction of our output.

Q. As a professor of metallurgy have you any indications of iron in your coal?
—A. We have not, I understand.

By the Chairman:

Q. What about the quality of coal as you increase the depth of your mines? Does it improve?—A. It makes a very good advertising stunt. In some cases, yes, everything considered, equal probably, there are so many governing factors. It is not a rule by any means.

By Mr. Cowan:

Q. Does the demand for that coal come in seasons?—A. Yes.

Q. Has that had the effect of in any way increasing the cost?—A. Tremendously.

Q. Have you taken into consideration at all the question of storage facilities throughout the area you serve?—A. We are conducting under this Research Council

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a series of testing and of storage of all the different grades of Alberta coal. We are storing the different grades, lump coal, what they call egg coal; lump coal and other slack. We are testing all the different grades of moisture, coal screenings. They store them over different periods and are screening them, are analysing them to find if there is any loss in heat value and put them back in the stores for two years.

Q. Apart from that, and after you have that all done you have the further problem of inducing the people to buy it and put it in storage?—A. Yes.

Q. What efforts are you making in that direction, to educate the people to do it?—A. In Edmonton field, the mines of these groups here are giving the summer differential.

Q. How much?—A. If I remember it was 8 per cent in April, 6 in May, 4 in June, 2 in July, net in August.

Q. Do you know whether they have attained any particular success at that?—A. These mines in this district are running steadily on that scheme, except for this year, they are practically running all the year around.

Q. The Regina Commissioner reports to me that their city storage for their power plant, where they take 16,000 tons, that the differential should be a little less than one dollar to be profitable, but for smaller amounts it would be more than that.

—A. On the coal that he is buying it would be less than half a dollar.

Q. There are only three differentials that I can see that are obtainable, one is from the producer, the summer differential, the other is from the labourer, the other is on freights. The producer is giving a summer differential. Labour is not giving a summer differential. They would like to have a whole year differential and the freight differential can only be given from the railway, so what I would like would be the three, a combine to form a differential which would induce the people to put in their coal earlier in the season.—A. Yes.

Q. The railway and the labour charges under the Railway Commission and the Dominion Government?—A. Yes.

Q. Do you know whether Mr. Armstrong, our federal representative there, has ever tried to get the labour men to grant a differential of that kind so as to keep them employed in the early season?—A. I am informed that Mr. Armstrong was approached recently, and Mr. Armstrong said he would wait until something was done in the States.

By Mr. Chisholm:

Who is Mr. Armstrong?—A. He is your Federal Director of Coal Operations.

By the Chairman:

Q. You have not actual knowledge of that?—A. No, I have not.

The CHAIRMAN: I think that evidence should not be given.

Mr. McKENZIE: This is interesting to a Nova Scotian. I did not know who Mr. Armstrong was.

The CHAIRMAN: I really think the witness should not be asked to give as evidence what which he has heard.

Mr. McKENZIE: I did not understand. I know Mr. Armstrong very well and would be surprised if Mr. Armstrong said something that was not—

WITNESS: He is the Director of Coal Operations.

Mr. COWAN: Practically all mining operations in Alberta are under his directions. When he says the price of coal shall go up it will go up.

By the Chairman:

Q. What difficulties do you find in the way of extending the markets for Alberta coal? That is, what difficulties have come under your observation?—A. Criticism

[Professor N. C. Pitcher.]

of quality. Heavy investments made by American competing companies, you mean such things as that?

Q. Yes. What are you doing to overcome the first difficulty?—A. We are demonstrating how to properly use the coals.

Q. That has been outlined already in Winnipeg?—A. Yes. Mr. Cote told you there was the Trade Commissioner and a Fuel Administrator.

Q. And the second?—A. Is the competition already established, with large investments, American dollars. We can do nothing about that, of course, except to make our competition so severe that they will withdraw.

Q. In what field do you meet that competition?—A. In Winnipeg. In the western countries Alberta has its competition with B. C. lines.

By Mr. Douglas:

Q. That problem in Alberta, with the problem in Nova Scotia, and the fact that the Alberta Government has a Trade Commissioner and a Fuel Administrator in Winnipeg, what suggestions would you be inclined to make in regard to Nova Scotia coal in this main market, we will say Montreal?—A. A man can always run the other man's business best and we in Alberta have wondered why certain things were done in Eastern coal. Probably it would be in very bad taste for me—

By Mr. Keefer:

Q. No. it would not.—A. For instance, I understand the Dominion Iron and Steel Company have coke ovens lying idle. Very largely coke has been sent into the districts supplied with anthracite. Scores of agents have gone in there. Metallurgical coke does not act the same as anthracite, but it is a perfectly good fuel. I would think that the Nova Scotians might turn out a large quantity of coke and find a market for their by-products and replace a very large amount of that anthracite in Ontario.

Q. In Winnipeg?—A. In Winnipeg.

Q. And in the industrial part of Winnipeg particularly?—A. Yes.

Q. It is quite possible coke may be used in these ovens?—A. If some of these volatiles are left it is coal. A lot of volatile coke which is being made in some place in the States very successfully with some volatile left in so it will kindle easier, and I am of the opinion after experiment such a coke as that can be turned out from the ovens in Nova Scotia. I would think that would be one way of getting this market. We have that in mind in Alberta. We are going to try to make domestic cokes out of our bituminous coals. We think our raw coal will do in some districts, our powdered coal will do in other districts, and our carbonized coal will do in other districts.

By Mr. Douglas:

Q. Generally when you say that you are saying those are the problems the Alberta Government are dealing with?—A. Yes. We are very young at the game and we have a lot to learn, but we are rather proud of the progress we have made in one year.

By Mr. Keefer:

Q. If you can increase your payroll in your own province as you have done, I don't think any bricks can be thrown at you. I wish our province of Ontario would wake up to the same situation regarding iron. Have you anything to say regarding Alberta coal?—A. I can give you the quantity of coal and the quality of coal at a certain given moment. We can send you coal from the Lethbridge coal branch and from the Drumheller field. Even then it would stand up in shipment a month or two months.

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By Mr. McKenzie:

Q. The first day we met here I suggested to the committee we could use that coke for a high class fuel, and I think it was Mr. Ross who asked me the price and I could not tell him. Can you give the committee an idea of what price that coke, a low volatile coke, could be placed aboard cars or aboard steamers, say at Sydney Harbour?—A. No, sir, I could not.

Q. You don't know whether its cost would be prohibitive?—A. Its cost would be lower than metallurgical coke. For this reason you get more of the original ton you put in. In the ovens which they have at Sydney I am not sure what per cent their coke is, but we will say it is 70 per cent of coke. With this partial coking you would get .8 of a ton and the process would be a cheaper process for that reason. You get the same by-products with the exception of tar, which is not the most valuable part of your by-products. They would get more coke per ton of coal put in, and for that reason if they could make a small change in their ovens and get that oven to work cheaper it should be cheaper than metallurgical coke.

By the Chairman:

Q. What capital would be required to organize a plant of that kind?—A. The old ovens are very expensive.

By Mr. Cowan:

Q. In Nova Scotia they have these plants now?—A. Yes, they have it now.

By Mr. Douglas:

Q. The reason you are unable I suppose to tell what the cost of the coke would be, you would have to first know the cost of the coal.—A. Yes.

Q. Can you give the committee any idea outside the cost of the coal? Or can you give us any idea what the additional cost would be per ton?—A. You can ask Mr. Pitcher that question. He can give you the figures on coke production.

By Mr. Keefer:

Q. Is there any place where they are using the old Beehive?—A. The only plant is at Coleman, and they are not operating now.

Q. Burning domestic coal in Alberta can the same furnace be used that can be used in burning anthracite?—A. Yes, they can be used but not to the best advantage.

By the Chairman:

Q. What variation has to be made?—A. That is also on our programme of research work. We have six different kinds of furnaces we are trying to experiment with. Mr. Gurney has said he would build any furnace we designed, and by the time we are finished we will probably have a furnace evolved which will probably much more effectively burn those coals. We know in general you need bigger combustion space than you do with anthracite.

By Mr. Keefer:

Q. Can you give us any suggestion how we can advise people using the present furnaces if they cannot pay the price for anthracite?—A. That has been covered pretty extensively by publications of the U. S. Bureau of Mines, and also the University of Illinois has done a lot of work on that.

Q. Can you give us a short summary of the results for the ordinary layman this winter, who instead of paying \$17 or \$18 a ton for anthracite, would like to burn bituminous?—A. Anthracite coal you can throw on top of a fire. You will ignite that coal from in under and your flaming gas will pass through burning. Bituminous

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coal acts differently. You have a glowing fire. The first thing is a distillation process. The next thing that happens you get a coke on top. By the time that coke gets good and heavy you must have had in some place in your furnace a pocket of gas, and you get an explosion. The most satisfactory way is by burning by the bituminous method. You first get a good fire; go and take your shovel and shove your glowing fire to the back of the grate. Leave an empty space for the green coal. Put that into the space and it distils all gases. Pass over the coal and it is lignite. That is a short way of what I could tell you. As I say, if you send for those bulletins on combustion in domestic furnaces you will find about the control of your dampers, and so on. It is a very large subject and they have done some good work on it.

Q. You have not any alternatives for fuel out there besides coal? You have no oil in your nearby country?—A. Far be it from me to say that. There are promoters who say we have. I am not going to enthuse over it.

By Mr. Douglas:

Q. How many operating companies are there in Alberta?—A. The Mines Department say 280. Last year there were 320.

Q. What are these capitalized at?—A. From two bits up to \$6,000,000.

Q. You don't mind telling us what is two bits?—A. Twenty-five cents.

Q. What company is capitalized at \$6,000,000?—A. The Crow's Nest I think is about \$6,000,000. When we speak of Alberta we generally speak of the Crow's Nest as being in Alberta. They are just across the border.

Q. What other large capitalized companies are there?—A. The North American Collieries that I was with for a long while. They have an investment I know of over \$3,000,000. I am not quite sure what their capitalization is.

Q. Are there any other companies with capitalizations of over \$1,000,000?—A. I think the International is. Of course the Canadian Pacific Railway mines are not capitalized separately. Nordeg mines belonging to Mackenzie & Mann interests would be quite heavy, and the Mountain Park Coal Company have an investment of over a million dollars in their property. The Kenmore people have probably three-quarters of a million dollars investment there, and through the Crow's Nest there are several mines—the Hillcrest I think are capitalized at two and a half million, the Hillcrest Collieries. There are some very large companies turning out very large outputs, not as large outputs as you have in your Nova Scotia mines. The Franco Canadian, the West Canadian Collieries are turning out, I think roughly, three thousand tons a day. That is a large mine. The Nordeg mines are turning out about two thousand tons a day. There is a stripping proposition on this line turning out about two thousand tons a day. Some of these mines on the Crow's Nest are turning out 1,600 or 1,800 tons a day. The Fernie mines turned out 3,000 tons on big days.

Q. You mentioned the most important collieries in Alberta. How would their surface equipment compare with the surface equipment you found in the mines in Nova Scotia?—A. Generally speaking they are not as good. Our best mines have a surface equipment equal to Nova Scotia, but generally speaking the surface equipment the investment in machinery is nothing like the Nova Scotia investments. We have a great many coal gopher holes that are worked by some of the miners, who go back and quit.

Q. Would that mean the surface cost should be cheaper in Nova Scotia on account of their better equipment?—A. Not necessarily. In our domestic field our surface costs are very high on account of the need of preparation. First they screen their coal into three or four sizes. They have to clean their coal on picking belts. Some of the collieries use spiralizers and these are expensive. You have to elevate your coal and reload it for the operators, but our bituminous mines do not go to any great expense in preparation, not as much I would say as the Dominion Coal Company for instance but I would say if the rates were equal the cost of surface preparation in most of the Dominion Coal Company mines would be higher than the cost of preparation in the

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most of the Alberta bituminous mines, but not so with the domestic mines. I think in the Fernie mines they are more than the Alberta mines in the preparation of their bituminous coals.

By Mr. Keefer:

Q. We have had a good deal about coal for domestic consumption. Can you give us any relativity of coal? For instance how much coal is needed to turn out a ton of paper or a ton of salt?—A. No, sir.

Q. I heard it said two tons of coal were necessary for a ton of paper?—A. At Christmas time I was down at the salt fields, and it was one ton of coal for one ton of salt.

The CHAIRMAN: We wish to hear from Mr. Young. It is going on to twelve o'clock. Any further questions to ask this witness?

By Mr. Douglas (Cape Breton):

Q. These larger collieries you refer to in Alberta, do they do any other business besides mining coal?—A. Some of them. Some are merely miners. Some are storers. They own the stores. None of them do transportation business. A few of them supply water and light to other towns and nearby villages. Apart from that there are very few of them that have any outside revenue.

By Mr. Keefer:

Q. Speaking of making light from coal, is there not a tremendous waste in producing electric light from coal as against producing it hydro electrically?—A. Not particularly, because in the afternoon and nights—

Q. I am speaking of the towns that are using coal for light. It is a tremendous waste, is it not?—A. Not where you can get comparatively cheap coal.

Q. At what price?—A. That depends on your power and installation. Your capitalization of an ordinary plant to-day for hydro electric light will run you into very much larger money, many times larger—

Q. Your operating charges are very much less?—A. You are not entirely free with hydro electric on operating charges.

Q. I know, but much less?—A. It is just a question of charging up your interest charges against your operating.

Q. Are you advocating the use of coal against hydro electric?—A. At certain places. The Alliance Power Company use slack coal that costs them from 25 to 75 cents a ton at the mines. They were burning this on chain grate, the stokers operating there chiefly. They pay about 20 per cent dividends on that.

By Mr. Douglas (Cape Breton):

Q. We were dealing a moment ago with surplus costs?—A. Yes.

Q. Now take the underground costs by comparison of these collieries you have referred to with say the larger operators in Nova Scotia?—A. In a general way.

Q. Yes.—A. As I said, Mr. Douglas, the Alberta miners have no water to contend with. That is quite a problem in Nova Scotia. For instance, all our bituminous mines have heavy costs, much heavier as I remember the Nova Scotia mines.

Q. So that the ventilation costs would be heavier than in Nova Scotia?—A. Yes, and that would more than offset the pumping costs, I would think. I would say the timber costs in Alberta are higher per ton than they are in Nova Scotia. The other costs of course depend on your schedule of wages.

Q. With regard to the keeping of costs, does the Alberta Government require the colliery companies to supply them with statements of costs?—A. No, but the Director of Coal Operations generally does.

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Q. How are costs generally kept in Alberta, on the short ton or the long ton?—A. Short ton entirely. The only costs that the Alberta Government require are the payroll in order to work out the compensation.

Q. You made the statement you would get cheaper coal if you had less coal in Alberta?—A. Yes.

Q. Would it follow because there is a very limited quantity of coal in Nova Scotia in comparison with Alberta that we should have our coal cheaper than in Alberta?—A. That combination that was made when the Dominion Coal Company was formed undoubtedly lessened the cost of the coal. Competitors were pretty well excluded. In other words a steady market was obtained. Every new mine that opens in Alberta means the neighbour works so many days less.

By the Chairman:

Q. Your market is not sufficient for the capacity of the mines?—A. No, if you have a mine and they are working on half time and you start a third mine, they only work one-third of the time.

By Mr. Douglas (Cape Breton):

Q. So the formation of the Dominion Coal Company decreased considerably the cost on account of the steadiness of the market?—A. Yes, I think that is one of the advertised objects.

Q. You would hardly contend the larger the capitalization the less the cost would be?—A. Not when you figure interest on your capitalization. Capitalization and expenditure are two different things, of course.

Q. What allowance is usually made for colliery consumption in Alberta?—A. It varies tremendously. The minister filed with you the annual report of the province in which it gives the colliery consumption of every mine, and the percentage of the total output. It varies very much with the amount of the output. We have a certain fixed amount.

Q. But the Government does not fix a stated amount as being allowed for colliery consumption?—A. Not as far as I know. I think they would scrutinize any suspicious figures.

Q. Have you noticed any greater efficiency with the miners in Alberta during the past six months, say?—A. During the war I made up a very interesting set of figures. In 1917 and 1918 we had 1,000 employees averaging about a 30 per cent reduction. That was on top of a 200 per cent increase in wages. Besides the increase in wages we had a 30 per cent reduction in efficiency in the general labour, not so much in the contract men. We found that absenteeism ran as high in our drivers as 20 per cent. Our higher up men had the highest percentage of absenteeism. The average in the five collieries was about 12 per cent extra holidays. Since the war has stopped and men have become more plentiful I think we are probably back more to normal conditions and more attendance to work, though it is hard to tell what normal attendance is when you are only working half time.

Q. Would it be safe to infer that efficiency and increased production has improved to the extent of from 20 to 30 per cent in the past six months?—A. I would say so, yes.

By Mr. Cowan:

Q. Who is getting the benefit of that increased efficiency?—A. That is going to Mr. Operator. He is selling his coal at an advanced figure and he will get that increase. He lost it during the war.

By Mr. Douglas (Cape Breton):

Q. I think Mr. Vaughan the other day gave some evidence in regard to offers that had been given to the Canadian National Railways for coal this year in comparison with last year. I think his statement was that the offers were lower than last year.

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Do you see any reason why the offers should have been lower. Can you see any reason?—A. In Alberta, no, not since the last increase was given to the men. Mr. Young can give you that thought, but not since the last increase was given to the men. I don't think there was any question about their increased efficiency. In Alberta there would be a tendency to lower the price instead of raising it. Material has gone down very little yet, but material will go down, and I can see no reason for the recent advance in price in Alberta.

Q. In the production of coal, what proportion would be material, and what proportion would be wages?—A. We figure two-thirds wages and one-third material; sales, costs, and so on.

Q. One-third material for your mines cost and colliery supervision?—A. Yes, not including your overhead or president's salary, directors' fees, and salesmen; that would not be included, but generally speaking at your mine your mine costs would be two-third labour, one-third material.

Q. Have these larger companies in Alberta in 1920 been paying dividends, bond interest and so on?—A. They have only been paying the men, as far as I can make out, and some of their material bills. The coal mining interest of Alberta is not very prosperous from a dividend paying point of view. Some of the mines have been doing very well. Some of them have not.

Q. But it would be largely due to domestic work?—Yes.

Q. If the mines worked steadily, in other words, all the year around instead of seasonal?—A. It would be an absolutely different story.

By Mr. Cowan:

Q. Then the storage will settle that problem?—A. Quite so.

Q. Do any of these large companies in Alberta provide housing accommodation for their men?—A. In outlying districts they do entirely. If they are near a large village they do not.

Q. Generally speaking are they pretty comfortably housed?—A. The district west of Edmonton, for instance, supply all the accommodation; the Nordeg district, all accommodation; Banff and Canmore, pretty well all; and the Crow's Nest district here are several villages there so that a man is more apt to build his own home.

Q. Do you find less unrest or labour troubles where they have provided these homes than where they have provided their own?—A. Oh, yes, a man who has a stake in a district has much more interest. We have had strikes stopped by the housewives in different mines. It makes a big difference in employing married men and single men.

By Mr. Douglas (Cape Breton):

Q. You have a reason for some of the collieries at least not doing well in Alberta the fact that they are not working steadily in these seasonal occupations. I suppose they could hardly raise this price for coal out there on account of American competition?—A. It is a question of restricting the market.

Q. The present duty is 53 cents?—A. Yes, I understand so.

Q. Have you anything to say on the question of duty for their protection?—A. No, I think that could be looked after if we had the orders. The duty does not affect us until we come to the east end of the market, of course.

The CHAIRMAN: Anything further? Well, Mr. Pitcher, that will do. Thank you. I am sure the committee wishes to adjourn at one o'clock. It is your desire to adjourn to-day? Let us decide that before we commence the examination of the next witness.

Mr. CHISHOLM: Yes.

The CHAIRMAN: Very well, the committee will adjourn at one o'clock. We will endeavour to complete our examination of the next witness in that hour.

Witness discharged.

[Professor N. C. Pitcher.]

Mr. R. M. YOUNG, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. Secretary and Commissioner of the Western Canadian Coal Operations Association with headquarters at Calgary.

Q. How long have you held that position?—A. Since the first of the month.

Q. What position did you hold before that?—A. Secretary of the Crow's Nest Pass Coal Company.

Q. For what time?—A. I was with that company for seventeen years.

By Mr. Cowan:

Q. Ever since its incorporation, as a matter of fact?—A. No, not quite. It was incorporated in 1897, I think.

Q. Have you a statement you wish to make to the committee?—A. No, I have no general statement. I came down here at the invitation of the representatives of the Government of Alberta and I did not know when I came what evidence was required by the committee, and the information given by Mr. Cote and Mr. Pitcher covered largely the operations of the Alberta coal fields.

Q. Can you give us an idea as to the condition of the coal trade in 1913 compared with the coal trade in 1920 and 1921?—A. If I did I would be speaking largely of the conditions in British Columbia because at that time I was connected with the Crow's Nest Pass Coal Company.

By Mr. Cowan:

Q. As it is on the border you are in District 18?—A. Yes. The Crow's Nest Pass Coal Company is part of the district of which the larger part is Alberta. The conditions in 1913 as compared with 1921 were largely the conditions expressed by Mr. Pitcher in his ratio of \$2.47 as the average rate for outside labour at that time compared with 65.8 cents. the rate to-day, which, taking 100 as a factor is about one hundred and thirty. Those points I would like to mention are in connection with the Federal control in connection with those wages. At the time of the war the tendency of labour was to demand increases as fast as they could think of them, and getting them, and it was practically impossible for each individual company to deal with labour under those circumstances separately. At that time the Federal Government sent a representative up to Lethbridge to assist the companies in the Association in negotiating a new agreement in April, 1917. The representative at that time was R. F. Green. Following the making of that agreement, the Federal Government appointed Mr. Armstrong to take charge of future negotiations and be of assistance generally in keeping the mines working during the period of the war. I don't think anyone disagrees with the statement among the operators at least that that control was wise.

By Mr. Keefer:

Q. During the war?—A. During the war. It kept the industry operating on many occasions when undoubtedly it would have been idle if it were left to the individual companies to deal with their respective employees. The demands made by the men were unreasonable, and arose out of their expectations that they could secure them under abnormal circumstances. When a demand of this sort is made the tendency of Mr. Employer is to leave his mine idle before he would accept it. Now during that period we had eleven increases altogether.

By Mr. Cowan:

Q. Increases in wages?—A. Increases in wages. Some four of them were due to increases given definitely to cover the high cost of living. The others were wage

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increases either at the termination of agreements or following similar arrangements made in the States, and they have brought the wages from \$2.47 for outside labour up to \$6.58. The first figure for the ten-hour day and the last for the eight hour day.

By the Chairman:

Q. Eight hours is the length of the day?—A. Eight hours is the length of the day. In British Columbia it is the statutory day; in Alberta they can work longer but they have to pay on the eight-hour rate; additional overtime at the same hourly rate. A man works ten hours, he gets a day and two-eighths.

By Mr. Keefer:

Q. Now the war is over, what about the control?—A. The trend of wages to-day is down. If that control is to be continued it will have to assist in bringing those wages down instead of further up, but I believe even still under the circumstances the operators in the West are generally of opinion that Mr. Armstrong can be of equal value in bringing things back to the normal condition in the opposite direction the same as he was during the war.

By Mr. Cowan:

Q. How long has his control to run. I understand some arrangement has been made whereby this control runs. How long does it run?—A. I believe it runs until the end of the present session, unless renewed by Parliament, but I understand both operators and miners have petitioned the Government to continue this control for another year.

By Mr. Keefer:

Q. That is quite separate from the Fuel Control?—A. Yes, I think so.

By the Chairman:

Q. You mentioned \$6.58?—A. Yes.

Q. Is that the wage that is being paid now?—A. That is the lowest day rate that is being paid now.

Q. Has there been any drop in wages yet?—A. No, the highest rate would be that paid to the contract miner. It varies according to the tonnage produced, from about \$8 to \$11. The average would be about somewhere between \$9 and \$10 a day.

By Mr. Cowan:

Q. Do they usually work six days a week?—A. Not by any means. This low rate is \$6.58. The highest day rate would be about \$8.14. The average contract rate would be somewhere around \$9.50, so the average rate throughout was \$8. The returns of the Department of Mines in Alberta last year showed \$19,000,000 paid to 12,000 men, an average of \$1,600. Taking their average wages as \$8 would represent 200 working days.

Q. Supposing a contract worker does this, he makes enough in four days and does not work any more, what happens to the day worker?—A. He is affected to a similar extent. If he is a driver it may result in laying him off.

By Mr. Keefer:

Q. Go ahead with your general statement?—A. I don't know that I have anything further.

[Mr. R. M. Young.]

By the Chairman:

Q. You have referred to the labour difficulty?—A. Yes.

Q. What other difficulties do the operators experience to-day?—A. The general difficulty is in connection with the market at the present time. The market has fallen off to an extent where many of the companies are not working more than two days a week.

Q. What do you mean by the present time?—A. During the last four months I think the maximum working at the present time is four days. I don't know of any company working more than four days.

By Mr. Keefer:

Q. Can you give us an idea of the falling off of that market?—A. I would say that the market at the present time is not more than 50 per cent of the normal market.

By Mr. Cowan:

Q. It does fall off usually at this time of the year?—A. There has been an abnormal falling off this year, partly due to the falling off of traffic on the railways. At the present time the railways, I believe, have their large stocks of coal on hand in the West.

Q. In the Crow's Nest?—A. That is largely coking district. The Western Crow's Nest at Fernie, the larger part of their business is coke.

Q. Where do they sell their coke?—A. Mostly to the smelters. A smelter at Trail, a smelter at Northport, at Amyot.

Q. Have you much of a market across the Spokane?—A. No.

Q. Could that be shipped to Winnipeg profitably?—A. Yes.

Q. Does the present freight rate affect it materially?—A. The Crow's Nest Company do ship their coke to Winnipeg at the present time, but it is mostly what they call foundry coke.

Q. It could be used in houses without any trouble?—A. It would probably have to be broken up. Those are ordinary beehive ovens.

By Mr. Keefer:

Q. Where?—A. At Fernie, Mitchell and Coleman.

By the Chairman:

Q. Can you tell us something of the increased cost of production, the average in the Alberta mines as compared with two or three of the Nova Scotia mines?—A. It bears the same relation to 1914 that the increase in wages does.

Q. Is that the only item?—A. There is the cost of material, which in many cases has gone up just as much.

Q. About what is the increase?—A. In dollars and cents?

Q. Yes.—A. I think that varies so much in its physical conditions, for example, in some of the mines very much less material is required than others. In the mines of the Crow's Nest the material required is very heavy owing to the roofing conditions of which Mr. Pitcher spoke. In some of the other fields roofing conditions are low, but without going into a definite figure the present time would bear about the same relation as to wages at that time as they do now.

Q. What suggestions have you to make in regard to providing storage facilities to get continuous employment? Are they doing anything in that connection?—A. Yes, I think they are co-operating with the Government in Alberta.

Q. Are you willing to give the differential that was spoken of, your share of it in order to provide that?—A. No, I cannot give that, because as an Association we have no question of price at all. We do not deal with the price question. The Association

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was formed in connection with the wage agreement and to look after that end of the business by which all the operators are affected alike, and there is no discretion at any time in connection with prices.

By Mr. Douglas (Cape Breton):

Q. Is price fixing governed by your institution in any way?—A. I would not be sure whether it specifically excludes it, but the objects of the Association do not govern price fixing at all.

By Mr. Cowan:

Q. Mr. Armstrong has fixed prices for several years?—A. In those seasons when the demand came for an increase in wages for one or another reason, Mr. Armstrong usually asked the Association and the individuals in it to advise him what that would mean in costs per ton, and if he saw fit to grant that increase he similarly granted the increase which he was advised was equivalent to it. In that sense he adjusted prices.

Q. How many companies are interested in your Association?—A. About 40.

By Mr. Keefer:

Q. You are practically in charge of the labour question for your Association?—A. Entirely.

Q. You are representing all the main producers as far as labour is concerned?—A. Yes.

Q. And then you deal with Mr. Armstrong as representing this Association on all labour questions?—A. Yes.

Q. As a representative of the coal miners you advise the continuation of this present system for another year?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. What proportion of the output of Alberta is represented in the operators' Association?—A. I should say 80 per cent anyway.

By Mr. Cowan:

Q. All the larger companies?—A. Yes.

By the Chairman:

Q. Any difficulty in getting employees?—A. No, not at the present time.

Q. Any time throughout the year?—A. No, not in the last year. The situation has changed completely in that respect. In fact I might say that some employees of some companies have come to the operators and asked them whether they could assure them steadier work if the wages were reduced.

Q. So it is a much more reasonable frame of mine?—A. Yes, almost an unique frame of mine.

By Mr. McKenzie:

Q. Is your coal miner a certified man?—A. Yes.

Q. Are these certificates provided by the local Government?—A. Yes.

Q. They have divided jurisdiction in the West about the coal between the Dominion and the local?—A. Not in respect to the miner himself. I think all matters in that connection come under the provincial jurisdiction.

Q. You are looking after the labour end of it?—A. Yes.

[Mr. R. M. Young.]

Q. Are you able to look after the necessities and the requirements of Alberta and Saskatchewan for coal for domestic and industrial purposes?—A. You mean is the output sufficient to do so?

Q. Yes. You can look after all their requirements, both industrial and domestic?—A. Yes.

By Mr. Cowan:

Q. You could add Manitoba to that too?—A. I take it one of the strong points is, not only to add that, but to add the two and a half million tons that the Americans at the present time ship into Canada.

By Mr. McKenzie:

Q. American coal displaces you to the extent of two and one-half million tons?—A. In other words, there is at the present time capacity for production which would enable us to take care of that two and a half million tons.

MR. COWAN: Which is chiefly sold in Manitoba and Saskatchewan?

WITNESS: Yes.

By Mr. Keefer:

Q. You also export to the United States?—A. Very considerably from British Columbia; probably to the extent of a million tons. There are only between 50 and 100 miles to the extreme east and the extreme west of the bituminous mines in the Crow's Nest Pass.

Q. I suppose if you want to widen your market you will do so if the price of production comes down?—A. We would hope to do so unless concurrently it came down in the States.

Q. How are your rates of wages as compared with the States to-day?—A. Our costs are very much higher than their's.

By Mr. Douglas (Cape Breton):

Q. Higher than what part of the States?—A. Higher than the field which ships into Winnipeg.

By Mr. Keefer:

Q. What is the ratio in wage in Alberta as against the wage in the United States?—A. I cannot give you any percentage, but we are higher.

Q. How much?—A. About 20 per cent.

Q. What is the difference between yourself and Nova Scotia?—A. I don't know except some of the operators tell me it is about 30 per cent.

Q. That would mean mining?—A. Yes, in some fields.

Q. What does that mean, the amount of money a day?—A. I think Mr. Pitcher is better able to answer that than I am. He was an operator in the fields where they used the machines.

By Mr. Douglas (Cape Breton):

Q. Does your Association embrace companies in British Columbia as well as in Alberta?—A. Yes, sir, in south eastern British Columbia there are two companies belonging to the Association.

Q. In regard to the fixing of prices by Mr. Armstrong, is this done all over the territory, or done in zones?—A. It is simply by an order authorizing the operator to add that amount to his price.

Q. And automatically that applies to everyone?—A. Automatically it applies to everyone in the Association.

[Mr. R. M. Young.]

Q. To everyone in the Association?—A. Yes. Naturally the outside man adds it to his price also, and as to the zone it applies to, it all depends how far he can carry his coal at that increased cost.

Q. But the price is the same for all at the mines?—A. Yes.

Q. For all district No. 18?—A. For all District 18.

Q. It is the same I suppose no matter whether the capital of the company is a thousand dollars or a hundred million dollars?—A. It is the same per ton. You see, for example, in one or two orders given by Mr. Armstrong the reduction of the cost shows the cost of the Drumheller field to be so many cents, then shows a different cost in the Crow's Nest field, and his order has given the varying figures as given by the operators.

Q. Well, then it is done by zones?—A. The giving of the order is done by zones in so far as the district is concerned.

Q. So if Mr. Armstrong finds it profitable to increase 25 cents a ton in a certain field, 25 cents a ton is allowed, to every company in that field.—A. Yes.

Q. Is it so much per zone, or so much per cent?—A. So much per ton.

Q. So the question of the amount of capital would not enter into it at all?—A. It does not enter into it at all.

By Mr. Cowan:

Q. It applies even to contracts already made?—A. I could not answer that because the authority is given dating from the time the increase goes into effect on the wages.

Q. I know it does. We had a contract with one of your companies and our manager gave an order and we were advised that that price had to be entered, notwithstanding the contract we had entered into.—A. I think if any increase in contracts were granted that would apply to your contract from the date thereof. Take, for instance, the last increase granted, 60 cents a ton, if the companies had not protected themselves against that they would have been out of business.

By Mr. McKenzie:

Q. You agree with Mr. Pitcher that your coal mines in the West can look after the coal supply as far east as Winnipeg, but not further?—A. I would say east as far as Port Arthur.

Q. You heard what he said?—A. I heard what he said, yes.

Q. Do you think you could extend your operations as far east as Port Arthur?—A. Yes, it practically means the eastern boundary of Manitoba. His differential was chiefly a between whether we could come to Manitoba or whether we could come to Ontario. I know at the present time a number of the operators in the Association are very hopeful of securing a market in Ontario. That they could do so under present conditions, under present freight rates, I think is practically out of the question.

By Mr. Cowan:

Q. If you were to give that summer differential could you carry into Port Arthur and Fort William by boats and land it to some of the ports in Ontario profitably with that differential?—A. I doubt it because I don't think the summer differential would be enough to overcome the difference in freight. I understand at the present time a number of the operators expect to appear before the Railway Commission on the 25th of April to propose to it that they will, as individuals, make a reduction in their prices for the putting in of coal during the summer months; that the dealer in Winnipeg will also make a reduction, and they will ask the railways to make a reduction in freight for the summer months. I believe the total of this put together would be about \$2.

Q. Would that enable you to capture any of the Ontario market or supply it?—A. I don't think so.

[Mr. R. M. Young.]

By Mr. McKenzie:

Q. Do you ever yard any coal in Winnipeg, or store it?—A. The Alberta companies do, yes.

Q. They have yards there?—A. Yes.

Q. Are your cars built in such a way that the bottom drops out?—A. A great many of them are hopper cars.

Q. I suppose they have elevators where the coal goes up and it drops into the yard?—A. I could not say.

By Mr. Cowan:

Q. Is it much more expedient to ship in the cars you speak of than in the ordinary box cars?—A. Take the smelters in their shipments of coke, they absolutely refuse to take a box car, because they have the overhead tramway, and they run the car in there and the thing runs automatically.

Q. They told us they could carry coal back from Fort William cheaper because they can use the ordinary grain car which is a box car. When it comes back, we will say to Regina, and they take that coal out, it has to be shovelled out through one door.—A. Isn't it very much more expensive to handle it that way than in the ordinary hopper car?

By Mr. Chisholm:

Q. Does that coal deteriorate very much under exposure to the weather?—A. No, not any reasonable length of time.

By Mr. Douglas (Cape Breton):

Q. They use automatic box car loaders, don't they?—A. Most of them.

Q. But unloaders, they have not got these?—A. Not for unloading.

By the Chairman:

Q. You have the Workmen's Compensation Act, have you?—A. Yes.

Q. Which all the employees of the companies come under?—A. Yes. That Act is being changed and British Columbia and Alberta will be identical practically hereafter.

Q. In that sense the employees are pretty well cared for?—A. Yes.

By Mr. McKenzie:

Q. How long is it since they had the Compensation Act in B.C.?—A. In 1917.

Q. The same time in Alberta?—A. I think it was later than that.

By Mr. Cote:

Q. We had the flat rate, but I think the province took the first step.

By the Chairman:

Q. What percentage of their wages do they secure?—A. 55 per cent.

By Mr. Cowan:

Q. Do they contribute any medical expense at all?—A. I think 3 cents a day towards medical expense.

By Mr. Douglas (Cape Breton):

Q. Do you know what cost is imposed on the coal on account of the Workmen's Compensation Act?—A. The rate in Alberta has been \$1.50 per \$100 of wages. That is one and one-half per cent.

[Mr. R. M. Young.]

Q. On the cost of a ton of Alberta coal, what does the Workmen's compensation amount to?—A. I can figure it out for you. There are \$19,000,000 of wages. 1½ per cent is \$285,000, and the tonnage last year was about seven million, that would be 4 cents.

Q. Four cents a ton?—A. Yes.

The CHAIRMAN: Anything further to ask Mr. Young.

By Mr. Ross:

Q. You don't think, Mr. Young, you could overcome your freight difficulties even if they handled this coal from Alberta into Ontario in trainload lots?—A. If they handled it at the right time of the year.

Q. Do you think the handicap is so great you would not be able to overcome that?—A. Under present freight rates and with the competition from other sources I don't see how they would lay coal down here competitively.

Q. Have you thought out any conditions under which it could be delivered in the Ontario market, that is on the freight rates you could pay in order to compete with American coal?—A. No, I have not.

By Mr. Keefer:

Q. Have you given us the price of the coal at the mines of the dearest grades?—A. Between the bituminous and lignite it varies.

Q. Say, bituminous?—A. Say \$5.25 at the mine.

Q. Is that mine run?—A. Yes.

Q. What is the analysis of your coal?—A. I am not familiar with that. I think Mr. Pitcher gave that in evidence already. It varies greatly throughout the entire field.

By Mr. Blair:

Q. Do you think it would be possible to lay coke down?—A. I doubt it.

By Mr. Cowan:

Q. On what is your association basing their hopes that they can. You said a while ago they were in hopes they could. On what do they base their hopes?—A. I think one of their hopes was that they would be able to secure reduced freight rates during the summer months.

Q. If that is done, you can, if they get the proper freight rate?—A. They would probably have to meet that to some extent by reduced prices, which latter cannot come until there are reduced wages.

By Mr. Douglas (Cape Breton):

Q. Material is going down very much, is it not?—A. At the time I left the Crow's Nest Pass Coal Company at the end of March I would not say it had gone down over 11 more than 20 per cent. Some things have gone down considerably, but others have hardly moved at all.

Q. Would you place about 20 per cent as the average?—A. About 20 per cent.

Q. Of that one-third, what proportion would be pit props?—A. In the Crow's Nest field it is pretty heavy. It would probably be pretty near one-quarter of that. The roof conditions and the floor conditions are not very good, and the amount of timber used is very high.

Q. The timber is taken from quite a distance, generally speaking?—A. In Alberta, it is, generally speaking. In the Crow's Nest field I would not say that the average would be more than fifty miles from where the mine is in the Crow's Nest field.

[Mr. R. M. Young.]

Q. What would be the average distance in the Alberta field you would have to take your timber?—A. For example some of the mines in the Drumheller field get their timber from the Crow's Nest district. It would be about 300 miles. There is no timber up there.

Q. Where do they get their timber in the Lethbridge field?—A. From the Crow's Nest.

Q. What distance would that be?—A. 100 to 150 miles.

Q. You don't know what the cost of the pit props is?—A. On an average it would be about 3 cents f.o.b. cars.

Q. Three cents what?—A. Per lineal foot.

By the Chairman:

Q. Discussing a while ago the manufacture of coke, can you tell what the value of the by-products would be?—A. I have not the slightest idea on that. A chemist could answer that question.

By Mr. Douglas (Cape Breton):

Q. You said that the average wages received by the miner was about \$1,600 per year per man.—A. That is in Alberta according to the returns of the Compensation Department.

Q. That would include construction?—A. Yes.

Q. That is not a fair statement as to the mining costs for labour?—A. No, absolutely not. That would include everything that came under the Compensation Act.

By Mr. Chisholm:

Q. \$1,600 a year for full time?—A. Yes.

Q. I understood you to say the average number of days work was 200 days?—A. That is what it would represent.

By Mr. Douglas (Cape Breton):

Q. If they had worked full time?—A. No, the way they do work.

Q. On the basis of 200 days?—A. On the basis of 200 days.

By Mr. McKenzie:

Q. Some days down here in the cold winter we get frightfully startled by hearing that people are starving for fuel in the West. Is there any truth in that and if so how would such conditions exist in view of the large supplies you have?—A. It might arise. On occasions it has been true. Sometimes, for example—take in 1911, which is going back a long way, we had an eight months' strike. During all that time Ralph Connor, who was appointed by the Federal Government, was doing his best to settle it. The strike was settled about in November. If it had lasted a little longer there would have been acute suffering at that time. The same thing is true of later dates when strikes have been brought on very wisely from the labourmen's standpoint at a time when he knew the operator could not afford to leave the mines idle, and along by the time they got working and got going again there was an incipient shortage, and at the same time difficulty in getting car supply.

Q. This shortage that startles us so much sometimes is brought about by local difficulties, not because you have not got plenty of coal and plenty of men?—A. Local difficulties.

Q. You have railway facilities ordinarily?—A. Yes.

Q. In future we will understand that if people are not getting coal it is all your own fault?—A. I would like the reporter to make a note that that is your statement not mine.

[Mr. R. M. Young.]

By Mr. Cowan:

Q. There is another condition out there that the people will not lay in their stock until fall, and then all the cars are in use by the railway company for grain purposes?—A. Yes.

Q. In this particular case was it not due to the fact that they could not get cars after they got back to work?—A. That is quite true.

Q. Which again increase the importance of those railroads getting in their stocks early?—A. Quite correct.

Q. The consumer in Alberta on that point does not differ materially from the consumer in any other part of the world?—A. True.

Q. In not buying coal earlier in the season?—A. Yes.

Q. What is your system of marketing? You have not told us about that.—A. Because as a member of the association I have nothing to do with it.

Q. Has your organization taken any means of acquainting people of the fact that they can get their coal cheaper in the early season than by waiting?—A. Individual companies circularize throughout the various sections.

Q. I never saw a circular of that kind in my life.—A. Ordinarily those circulars are sent to their local representatives. It is seldom usual to deal direct with the householder. These companies have their local representative meet their people to whom they suggest the advisability of putting their coal in at such time. I am quite sure that action is taken because they mine their coal more cheaply and they make more money by running more steadily.

By Mr. Ross:

Q. Mr. Caye said the other day in the Ohio field they have their own mines?—A. Yes.

Q. They produce their coal at \$2.30 a ton?—A. Yes.

Q. You say your coal at the pit mouth costs you \$5.50 I understood?—A. No, I did not say it costs that.

Q. What does it cost?—A. I don't know.

Q. Is that what you sell it at?—A. That is what it is sold at.

Q. You don't know what the profit is?—A. No, I am not here to give that information. I am representing an Association in which there are forty different companies. You want to get the individual producer to give you his costs. I have not got it.

Q. I am trying to explain away that discrepancy.—A. There is such a wide variation in the conditions in the different fields that I don't think an expression from an outsider not operating under like conditions would be a fair one.

Mr. Douglas (Cape Breton):

Q. You made the statement that the labour costs in your field were 20 per cent greater than the central field in the States.—A. On the wage scale basis.

Q. What would be the cost of your material in comparison with that central field?—A. I have no idea as to what it costs them. I was informed on one occasion by our manager At Fernie that the cost of one item in our Western coal fields would be the care of all the items in the Pennsylvania field, where he had been manager for probably fifteen years.

Q. Have they any mechanical appliances for mining there that you have not got here?—A. No. I think they have all the mechanical appliances, and probably more, but their conditions are better. Their roofing conditions are better. Then their working conditions are better. The question of timber—I understand the quantity of timber in a great many mines is negligible. Here the miner has to keep his timber right behind him up to the working face in our mines and he is prosecuted if he does not do so.

[Mr. R. M. Young.]

By Mr. McKenzie:

Q. In the sale and disposing of coal they come into competition with the American market?—A. Yes.

Q. With which do they find the most difficulty, the quality or the price?—A. The price. Originally the Alberta Government took hold of the situation. There was considerable difficulty in connection with the quality, but not so much in connection with the intrinsic value of the coals, because nobody knew about it, but since that has been general the question of quality has been a subordinate one.

By Mr. Ross:

Q. You have accentuated here to-day the increase of wages as affecting the price of coal to the consumer and making it so high, but you have seemed to kind of soft pedal on the question of profits to the operator. Where can we get that answer?—A. You can get it right here in this building.

Q. From Whom?—A. From your Department of Labour. The basis upon which the operators suggested to the Government that they were entitled to so many cents a ton additional for the wages given to the men.

Q. On the authority of the Director of Coal Operations, were figures which were audited by the Federal Government found to be correct, and we can get them in the Mines Department?—A. I believe you can get it from your Department of Labour or one of your departments anyway, whoever has those figures in his possession. The Minister of Labour, Senator Robertson, will be able to tell you if he has not got them himself.

Q. Will those show the profits of the number of companies?—A. In every case we audited to show whether those figures were a fair statement of what those additions should be, and that audit includes those figures.

Q. And that audit was made by the Labour Department?—A. Yes, I think it was made by the Labour Department, or the Department under whose jurisdiction Mr. Armstrong comes. I think it is the Labour Department.

Q. What do you consider a fair profit on a ton of coal?—A. After being twenty years in the business I am unable to say.

Q. You have no opinion?—A. Mr. Douglas raises a point in connection with that.

By Mr. McKenzie:

Q. I suppose it is like adequate protection?—A. Yes, but speaking the truth, gentlemen, the West has not been getting it during the past ten years.

Q. Do you mean there should be more than 53 cents a ton duty on the coal?—A. I did not understand what he meant by adequate protection. Take the case of an operator who has a very high capitalization, and another man with a very low capitalization. The Crow's Nest Pass Coal Company has a capitalization of over \$6,000,000. One of the reasons for that is because it was practically the pioneer in determining the cost and character of mining in that field, and it paid for it. Now some of you gentlemen say, part of that capitalization should not be recognized in the dividends that company may earn, but it was necessary to go in there and mine for fuel, to mine in the peculiar conditions of the field, which is unlike anything else in the world. It ran up against danger at least as great as anywhere in the known world. In finding out and getting down to a definite basis of operation, which cost them money. To-day it is paying a dividend on it, but I think from 1912 up it did not pay a single cent, but since that time for some years it paid somewhere around three per cent, and since that time around six per cent. I doubt if any of the other companies are doing as well.

[Mr. R. M. Young.]

By Mr. Ross:

Q. There were eleven increases made, four of them on account of the high cost of living?—A. Yes.

Q. Several of the others were made following increases made in the American mines?—A. Yes.

Q. A short time ago you said your cost of operation was 20 per cent higher than the American mines. How did that come about?—A. It was following percentages granted in the American mines. You probably might all remember the time when President Wilson stepped into the breach between the men and the operators, and after negotiations promised the men at the mines to determine what was a fair increase to grant to the miners at that time. They refused to go back to work unless they got some important concession and they were granted fourteen per cent, and they were to get the additional amount by the time the Commission made its finding. They got 27 per cent. Our men came to use and demanded a similar wage rate in Alberta and B.C. We said, "We will give you 14 per cent now," after considerable negotiation; and we had necessarily to say we would give them the balance when the Commission in the States made its final finding which we had to do.

Witness withdrew.

The committee adjourned until Thursday, April 21, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

THURSDAY, April 21, 1921.

The Special Committee appointed to inquire into matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Well, if the Committee will come to order, we will resume business.

The first witness this morning will be Mr. Wolvin, President of the Dominion Coal Co.

Mr. CHISHOLM: I have noticed there are a number of men not here whom I would like to see here this morning.

The CHAIRMAN: Get them up, and in the meantime, we will go on and not wait for the last man.

ROY MITCHELL WOLVIN, called, sworn and examined.

By the Chairman:

Q. What official position do you hold, Mr. Wolvin?—A. I am the president of the Dominion Steel Corporation.

Q. What connection has that with the Dominion Coal Company?—A. The Dominion Steel Company operates the Dominion Coal Company, and the Dominion Iron and Steel Company.

Q. Have you any official position with the Dominion Coal Company?—A. President of the Dominion Coal Company.

Q. Are there any other companies with whom you are associated?—A. I am the president of the British Empire Steel Corporation, and I may be president of two or three small subsidiary companies. I cannot say. They are of no importance in this matter.

Q. Let us get the connections of this company. The British Empire Steel Company is a merger recently organized?—A. It is a so-called merger, yes.

Q. And in it are incorporated what companies?—A. The British Empire Steel Corporation will have the control of and operate the Dominion Steel Corporation, the Nova Scotia Steel and Coal Company, and the Halifax Ship Yards, and various subsidiaries of those companies.

Q. Where does the Dominion Coal Company operate?—A. The Dominion Coal Company operates in Cape Breton County and in the vicinity of Springhill, Cumberland Co., Nova Scotia, that is, they operate there for mining, and they operate in Quebec and New Brunswick and other provinces for the distribution of their coal, and so forth.

Q. Give the area in square miles of the coal that you have.—A. My mind is not clear enough on that, and I would prefer not to give it.

By Mr. Chisholm:

Q. What is that—A. I said that my mind was not clear enough on that to give an accurate statement, but I would prefer not to make a statement unless I was sure I was correct. I should be very glad to furnish that if you wish it.

Q. Can you give us the estimated tonnage—A. Of our output?

[Mr. Roy M. Wolvin.]

Q. No, of your coal resources.—A. We have had various estimates running from possibly 2,000,000,000 to 5,000,000,000; some of it can be won and some of it probably we never can win.

Q. What varieties of coal do you mine?—A. Our coal is steam coal and coking coal. It is what we consider a rather high grade coal as compared with other coal.

Q. It is all bituminous?—A. All bituminous.

Q. No anthracite?—A. No.

Q. These were only preliminary questions, Mr. Wolvin. Have you a statement which you wish to make to the Committee? If so, we will be very glad to hear it.—A. I have made some notes this morning which I think will help me, as I think it will be better to give my ideas in a connected form, and then you can question me as you see fit. May I speak now?

Q. Yes.—A. It will be all right to refer to these notes?

Q. Yes.—A. May I ask if the Committee is on the front row?

Q. Yes.—A. I would like to say that we consider the appointment of this Committee by Parliament a very wise thing. There is not any question whatever but there should be a very careful study given to the possible increase in the supply of coal in this country in the future. It is one of our great problems and it needs very careful investigation to the end that some assistance or something must be done to increase the amount of actually Canadian produce coal, that is consumed here. I have had no opportunity to go over the testimony of other people who have appeared before you, excepting that of Mr. Vaughan, which I have been furnished with recently. That is the only testimony I have seen. I would like to help the Committee in getting any information they desire, and with the greatest respect to them, I would like to be frank enough to say that I think it is a mistake to delve too deeply into the actual cost, at public meetings, for public consumption. All of this information reaches our competitors, and our consumers, and a lot of people whom it misleads to some extent. In connection with that I particularly refer to information going out to the newspapers. We are a very large company and need to have the good-will of the people, and if we do not have the good-will of the people, we will not accomplish anything, and we cannot increase our coal production or do anything else. The people will lose confidence in us, and a little matter sent out is a very very dangerous thing. Here is a piece I picked up which reads: "Merger insists on pound of flesh. S.N.R. vainly begs Nova Scotia operators for satisfactory coal price. Reason is sought. Parliamentary Committee on Fuel summons Wolvin to Ottawa to explain."

By Mr. Chisholm:

Q. What paper is that?—A. The *Toronto Daily Mail*. That will do more harm and prevent the production of more coal than this Committee can ever overcome. That is the thought I want to give, that a little bit of information going out which does not set forth the facts is a very very dangerous thing. This has been in a lot of the papers, and with all due respect to our friend of the press, I wish they would be very very careful and send out nothing unless they give a complete statement; otherwise leave it alone, or it will do us a lot of damage. I would like to make a statement about the Dominion Steel Corporation. I refer to that instead of the British Empire Steel Corporation, because the British Empire Steel Corporation has carried on no operations of any kind. It has never made a price on coal—no price on coal has been made in which our companies are interested, of which I know, since the British Empire Company took over the two companies. Any prices or negotiations were all prior to that time.

The Dominion Steel Corporation, as I stated, operates the Dominion Coal Company and the Dominion Iron and Steel Company. Their steel operations are at Sydney, Nova Scotia, and consist of six blast furnaces, and two open hearth furnaces, bloom mills, billet mills, rail mills, plate mills, bar mills, rod mills, wire mills, nail

[Mr. Roy M. Wolvin.]

mills, and some other smaller mills and included in that are large by-product ovens, producing the various by-products of coal. It is a very large institution.

In addition to this, they operate mines for the production of ore for these furnaces. They operate two railroads, one of which has practically forty miles of main line, and thirty-seven miles on the other. They operate 21 coal mines, they operate loading piers at Sydney, at Louisburg, and at Parrsboro for the floating of that coal. They own a large fleet of vessels, and have under time charter additional vessels, the hire of which they must pay.

By Mr. Douglas (Cape Breton):

Q. What did you say you have?—A. We have vessels under time charter which are provided to move the company's coal from its docks, to keep their mines running, and to deliver the coal. They have rapid discharging coal docks at Montreal, Quebec, Halifax, and St. John. They own over 2,000 houses for their employees; they had a pay-roll last year of approximately twenty-two millions of dollars; they have an investment of about one hundred millions of dollars. When they are operating to full capacity, they employ about 15,000 men, and without taking into consideration the people in this country who own their bonds and their preferred stocks, and their other investment securities, they have approximately twenty-two hundred ordinary shareholders with an average of one hundred and seventy shares of stock. I make this statement so that you will realize that I represent a pay-roll of \$22,000,000 and about 2,200 people who have an average investment of probably ten or twelve thousand dollars in this company, and I have to look after interests of all of them. I merely want you to get the picture of the company in mind, and not a picture of a lone mine or anything of that kind, when you are discussing the Dominion Steel Corporation. I would like to say that this big investment was made in the steel plant, and all these docks were provided through the country because coal was discovered in Nova Scotia. Small operations were at first carried on and afterwards they were consolidated and very large operations undertaken, and in order to sell that coal the steel company was organized and is and always has been the largest customer of the coal company, ordinarily using one-third of its entire output.

By Mr. Keefer:

Q. Using how much?—A. Approximately one-third of the output of the coal company.

Q. The steel company is?—A. Yes. Therefore, the operations of the steel company and the coal company are very very closely allied, and the cost of coal means more to the Dominion Iron and Steel Company than it does to any other concern in Canada, or any other concern in the world, and if we do not have cheaper coal, we cannot operate our steel plant, so I am certainly in favour of reducing the cost of coal.

By Mr. Hocken:

Q. Does the steel company pay the same price for coal as the other customers of the coal company?—A. The steel company had a contract in the early days before the two were put together, based upon a lower price of coal. The cost of steel must be based, when we sell it, upon the cost of coal, because that is all in the one pocket.

By Mr. Keefer:

Q. Are we to ask questions now, or wait until the statement is completed?

The CHAIRMAN: I think we had better let Mr. Wolvin finish his statement.

WITNESS: If you will permit me to complete my statement I think it will be better and you can make notes and question me on them, afterwards, Mr. Keefer. I merely make the statement so that you will get the picture as I look at it. Now, the Dominion

[Mr. Roy M. Wolvin.]

Steel Company and this other coal company, which, of course, are both being considered by the Committee, are the big industries of Nova Scotia. They are a very large part of Nova Scotia. The coal shipped from Nova Scotia and the coal in the shape of steel (because every ton of finished steel has in it four and one-quarter tons of coal before it is shipped) so that the coal as coal and the coal as steel is undoubtedly very much the larger part of the exports of the products of Nova Scotia, and the operation of those companies, and their success means the livelihood of the province of Nova Scotia, and I feel that province is associated side by side with our shareholders and our men in every effort we make to build it up. I am giving this to you so that you will see that Nova Scotia has coal to sell, as Alberta has wheat, and it has to build it up and put its products on a profitable basis by the profitable operation of these coal mines. Now, the natural customers for our coal are the nearby institutions in the Maritime Provinces. Next after that comes—well, I will say, St. Johns, Newfoundland, Quebec, Montreal, and then, when we figure the further distribution of Canadian coal consumption we have to face the changes in the conditions which have taken place during the last few years. It is very probable that we have a natural market in the West Indies for bunkering, and possibly also in Europe for Nova Scotia products. It is a question as to how much of a market there is, the same as in the west, but that market is there under certain conditions, and we have to take into consideration the changes taking place in the coal mines and the costs there will be reduced in some proportion, so that we will be able to compete with the American coal. The field is there and we must consider that as well as the increased fuel consumption of Canada.

Now, a good deal has been discussed before the Committee upon the price of coal, and I believe the Committee is more concerned to-day with the future prices and how they are to be made up, and as that bears upon the increased use of the coal—if you will bear with me just a moment, I would like to give you my thoughts on that. In the first place, the big item is labour. That depends entirely upon the cost of living, and our labour costs are very very high and the cost of living is very high. They will go down together. The cost of living of course depends very largely upon wages all through the country, because Nova Scotia imports from the other provinces a great deal of what it uses. Next in the cost of our coal is the material. Materials have been very high. They will be reduced, but they will only be reduced as labour is reduced and freight charges are reduced. We are possibly one of the largest customers of the Canadian National Railways. We ship for many miles over their railway and they bring back the imports that we want from outside, and we will be very glad to have the rail rates reduced, although at the time of their application we did not oppose the increase in any way. The next is the reserve for the depletion of our coal areas. That is based upon the cost, to my mind, necessary to produce coal, after the nearby coal is used up. For instance, we are mining coal now two miles at sea at Sydney, and we cannot mine that coal as cheaply as we can the shore coal. That is sure, and we must bear in mind what will happen when this nearby coal is all used up. There must also be taken into account a reserve for accidents on account of the loss of mines. The farther we go to sea the greater danger there is of our losing an entire mine, which we may never be able to use again. Our coal is very gaseous coal, many accidents and explosions have occurred, and we lose the use of the mines to a great extent, and have great difficulty in getting them back if we ever get them back at all.

The next charge is depreciation on our capital with which all operators are familiar. The next is the cost of rail service on the material, and the rail service in getting our coal from our mines and piers into Sydney, and in that connection when you hear about "coal f.o.b. cars, Dominion Coal Company," it is not at the mines; it is at Sydney, and we haul that coal fourteen or fifteen miles for a small charge, while the Canadian National charges 50 or 60 cents, so that our prices are always at Sydney.

The next in the price of coal would be the actual value and purchase price of boats. We have a large fleet, and added to that is the cost of operation of the boats.

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All of that will go up and down with the cost of living and the cost of labour. The next is our extensive terminals, and their operation, which has to be added, and to all of this we will have to add sufficient profit to pay a proper hire upon the capital invested, and in addition to that to leave some money for the extension of our mines. That cannot be overlooked. Business must be increased, and as long as these profits are put into properties, which has been the policy of the Dominion Coal Company from the time it started, there should be included in the price sufficient to pay capital an honest hire and leave something for extensions to develop the business for labour and capital both to work in. Now the total of all those charges, and only the future can tell what they will be, must be competitive with the cost in other fields, and when you come to the consumption of our coal out in Ontario it means competition with the American field. Added to that are all the charges and difficulties of transportation. The mines in the American field are an entirely different problem than those in Nova Scotia. Our mines can only be compared with the competitive mines, that is, the anthracite mines in the States. It is a different proposition entirely. It is not the same at all. I would like to add to that, that where I say that the price must be based on a competitive price yearly—that if it is not a competitive yearly price it must be on long-term contracts based upon a reasonable profit, and fluctuating with the cost of coal. Otherwise we must get a good price when we can, and in plain English, take our medicine when we have to, but we must be given a chance to take care of ourselves.

The only testimony I have had an opportunity of looking at is that of Mr. Vaughan, the purchasing agent of the Canadian National, and that seems to have brought a greater amount of attention to our concern than any other. In connection with that I would like to say that our sales are handled by our sales department. Quite often there seems to be a difference in ideas of what the price should be, and after a good deal of effort and negotiations, the president of the Canadian National takes it upon himself to see if he can do a little better than the sales department. They generally negotiate with us for several months before they close a contract; they get a price from us, and then they get other prices, and they keep after us, and they send a chap down to interview us, and then perhaps another chap and finally Mr. Hanna comes along and closes it up. In making these remarks I consider it complimentary to Mr. Hanna and Mr. Vaughan, because that is their business to get the best price they can, and I will say that all of my relations with Mr. Hanna have been most pleasant, and I really believe that I do not know of anyone who could deliver better service to the Canadian National Railway than Mr. Hanna, and Mr. Vaughan's actions are along the same general lines. The negotiations go through a long period. I do not think we have ever had a contract closed with the Canadian National before the 1st May, and sometimes it is as late as the 1st August before we complete negotiations, so the contract, while not actually closed, is not a serious controversial matter at the present time, as we are delivering coal to them this year which was left over from last year's contract which they did not take in the time specified. The negotiations have been on. Mr. Dick has been working patiently with them. We have made them a tender. They have not as yet made us an offer. I will discuss some of the price considerations which we have had up with them, and I may say now that we are considering the proposition of a five-years' contract instead of the usual competitive business. We are trying to work with them, and they are trying to do business with us, and there should be no criticism because we have not as yet been able to get together. I wish they would get busy and do it quicker. Now, in Mr. Vaughan's testimony he stated that the Nova Scotia coal was not on a par with the American coal, but I want to give him credit for later on saying that the Dominion coal was very, very good coal, and I think we can safely say that the Dominion Company coal is of a higher quality than the American coal sold to Eastern Canada. It is pretty hard to get the customers to admit it. I am not here to advertise my company, but that is the truth about our coal. There has been much criticism about these

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several negotiations and I would like to say that the criticism has spread considerably. It has hurt me, because I am to blame for bringing about the condition towards which the criticism is directed.

I have here a letter dated April 6th last year. I will read it to you:—

“I have your letter of March 31st—”

By Mr. Keefer:

Q. That is last year?—A. Yes. This is before these negotiations started.

Q. Let us hear it.—A. This is from myself to Mr. Hanna. He had taken me to task because he said our price was altogether too high.

Q. Last year was an abnormal year?—A. Yes. I want to show the basis of the stand we took at that time.

“Dear Mr. Hanna,—

“I have your letter of March 31st, relative to the negotiations which have been carried on with our General Sales Agent for the purchase of a supply of coal for the National lines east of Montreal for the current year, and I am very much surprised at the way in which you view this matter.

“You refer to our very large production of coal and to the expectation on your part that you would receive 500,000 tons of coal from our company this year, and you will perhaps pardon me if I give you a little past history, so that you may see the situation from the same angle as I do.

“Our coal operations have been seriously interfered with by the war. The Military Service Act was put into force and our employees who did not enlist voluntarily were conscripted and sent overseas. Our orders from the Government were to produce all the steel and coal we could, and our coal production was pushed to the limit, and in such a manner that the development work so necessary in mining, was neglected. We therefore now find ourselves facing a very serious condition in our inability to produce any such quantity as we did in the past, and there still exists the great necessity for an absolute production with the labour we have. This condition of affairs still prevents our undertaking any real development work in a large way, which would make it possible to overtake the deferred development.

“Our men have very largely returned from overseas, but we find that very few of them are resuming underground work. It seems that these men who have lived all their working lives underground until the time they went into the army, have grown to like working in the sunlight and do not take kindly to their old tasks, which is also a great hardship to us.

“I am calling your attention to this, as to my mind this deferred development is an actual cost that should have been charged to the production of coal during the last four years, and which no one took into consideration.”

I will say our product was reduced from 5,000,000 to 3,000,000 and we made an awful effort to get the 3,000,000. That was the way the war left us.

“The production of our Cape Breton mines in 1913 was 5,307,847 net tons, and in the same year we delivered under our contract with the Dominion Iron and Steel Company, 1,361,914 net tons, leaving a balance of “commercial,” coal after deducting coal used at the collieries and so forth, of 3,418,048 net tons available for sale. In that year the National Railway purchased from us 109,446 net tons of Cape Breton coal, of which over two-thirds was shipped by water to Levis. This purchase by the National Railways amounted to 3.2 per cent of our total “commercial” coal.

“In 1919, this company produced 3,458,166 net tons of coal, and delivered on its contract with the Dominion Iron and Steel Company, 10,003,897 net

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tons, leaving, after deducting coal consumed at the mines, etc., 2,096,662 net tons of "commercial" coal. Of this, we delivered to the National Railways 153,515 net tons of coal, equivalent to 7.3 per cent of our commercial coal.

"I now find that during the first three months of this year our coal production has increased, as compared with last year, by only 4,000 tons, and the estimates given me for future production this year are not of a very hopeful character. Therefore, I must assume that our coal output will not show any appreciable gain for the current year. We are advised that the requirements under our contract with the Dominion Iron and Steel Company will be 1,255,973 net tons, which will leave us a total of available "commercial" coal from our Cape Breton mines of about 1,800,000 net tons, and based upon the nineteen hundred and thirteen percentage, the National Railways would be entitled to 57,500 net tons of coal.

"I have stated that our costs for the years nineteen hundred and fourteen to nineteen hundred and nineteen inclusive, are not correct, due to the figures not including the estimated cost of deferred development work that should have been carried out during that period, and while it is open to question as to what this should amount to per ton, I assure you that such additional cost is very serious.

"In addition to this, I wish to refer to the manner in which your people arrived at a price for our coal last year. We must assume that our people know their business. They asked you five dollars per ton, but the price was adjusted to meet figures prepared by your accountants, and the final basis was four dollars and thirty-five cents per net ton. I have before me a memorandum of arrived at a price for our coal last year. We must assume that our people know the basis on which your representatives figured what they were prepared to allow us. If these figures were corrected and the actual mining cost of this coal was substituted in place of the estimated cost prepared by your accountants, and when I say actual mining cost I mean on every ton of coal produced, including the slack for the Dominion Iron and Steel Company—we will find that you should have paid us five dollars and nine cents per net ton. Therefore, please bear in mind that we are just seventy-four cents per ton short of what you intended to give us last year."

"I think you are correct in stating that last spring our company was quite anxious to sell coal, and I want to assure you that we appreciate anything that you have done for us. I have looked up this matter to the best of my ability, and find that you called upon us for a price on coal on March 25, 1919, and we certainly must have had coal to sell, as we offered you from our Cape Breton mines, 600,000 tons. It was, however, a long time before anything was done with our offer, but you finally in August, 1919, definitely closed for a total of 100,000 tons for Cape Breton, which was later increased to 125,000 tons:

"This great delay on the part of the National Railways last year in determining what business they were prepared to give us, has to some extent guided our sales department in providing for this year, as it is necessary to place business well ahead.

"We certainly have no desire to seek new friends with the idea of dropping old ones. Our company and the National Railways will have to go on in the future practically as partners, you depending on us for coal, and we upon you for railroad service. The best basis for this exchange of business to my mind is always that we should receive the fair market price for our coal, and you the fair value for the service rendered.

"I have had considerable experience in the past in coal sales, and I have never known where a difference in price of five cents did not take the contract away from an old friend, and give it to a new one, especially in railroad

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purchasing, and unless there is some very long term understanding on prices, I do not see how you could consistently ask us to make very great reductions or sacrifices in the selling price of our coal. I want to impress on you that coal is costing more money every day; that we will not produce it this year as cheaply as we did last year; that we have increased wages recently, and we are now notified that the United Mine Workers desire to meet us in Truro this week for a discussion for further advances.

"We have offered your coal this year at a price over one dollar per ton less than we now have bids in hand for the same coal. You will agree that this is quite a sacrifice, but we are most anxious to maintain friendly relations and continue to supply you with coal.

"I note that American coal companies with whom you have been doing business for some years, have named you a price very much lower than could be obtained in the open market, and of course you will appreciate from what I have just said that we are also giving you preferential treatment. I am in touch to some extent with coal business in the United States, and it looks to me as if these coal producers are getting about \$1.35 per net ton more than they did last year on this class of business, which is a pretty fair advance, especially if figured on percentage of cost, and in addition, of course, there must be added the increased railroad rates in bringing the coal into the Canadian market.

"It seems to me that this matter cannot be adjusted by correspondence, and that ultimately it will have to be settled when you and I meet, and as we are most desirous of taking care of your needs, this company is reserving for your roads, 150,000 tons of Dominion coal, and 100,000 tons of Springhill coal, and we will have this for you at a price to be agreed upon, and I trust that we can discuss this in the near future."

The position was that we had sold our coal.

Now, just to show that we are always working in the proper spirit, I will read you a letter dated May 1, 1920, from Mr. Hanna to myself after Mr. Hanna had received the foregoing letter and had visited Montreal and conversed with Mr. Dick and myself, when we told him what we would do with regard to coal. We told him what price we would take, and he said: "All right, that is fine. How much coal can you give us?" I said we did not have any coal, that we had sold all the coal we had but would give him all the balance. Mr. Dick, however, felt so good that he told Mr. Hanna he would give him more coal, but I want to tell you, gentlemen, that it took our lifeblood to give it to him last year. We did not get the increased production we hoped for, and Mr. Hanna said: "I want to tell you there will be no buying of coal in the way we used to buy it. We are going to treat on a proper basis in the purchase of coal."

I will now read the letter:—

"Dear Mr. Wolvin:

"Referring to our conversation in Montreal on 29th ultimo.

"I am obliged to you for undertaking, on behalf of your company, to deliver coal to the National Railways, as follows:—

	Tons	Price per net ton
Sydney coal.	300,000	\$6.00
Springhill coal.	100,000	\$6.00
the above price being subject to increase or decrease, based on the wages paid to miners."		

In that connection let me state that the offer we made him this year (which we are negotiating) does not contemplate an increase over five cents a ton.

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"It was also understood that your company would deliver the Sydney coal at the rate of twenty thousand tons per month, or more if possible, up to November thirtieth of this year; the balance of the Sydney order to be filled before the first of April, nineteen twenty-one.

"The railway company is prepared to accept delivery of the Springhill coal at the earliest possible date, but it is understood that the order will be completed not later than April first, nineteen twenty-one. We hope to find that you will be able to increase the Springhill tonnage at a later date."

That is the manner in which our negotiations have been carried on. We are going to get that order, and there is nothing for us to be concerned about. At the same time it is an item in the ordinary course of business, and we would naturally like to transact it in our office rather than have it published in the newspapers in the manner to which I have referred.

By Mr. Keefer:

Q. Did you hear what has been said in reference to the taxpayer having to pay for the high price of coal?—A. We will pay for proper service. We have an increase in our freight rates, since the time we made our contract. We expected it. We have not been treated properly in regard to the increases because they did not increase the price of coal in order to give us a chance to get our money back when they took off the steel and supplies. I had all that in mind.

Q. That was in 1920?—A. Yes. I feel very badly about what I have had to read.

By Mr. Douglas (Cape Breton):

Q. In the letter of May 1, which you have just read, there is a statement that you undertake to deliver coal to the National Railways; I would like to know what was the amount delivered?—A. They are still receiving it.

Q. How much has been delivered of the amount contracted for?—A. We have offered it to them. We had to bank it. We have 170,000 tons of coal banked in Sydney because they cannot take it.

Q. How much did they actually take delivery of?

Mr. DICK: 110,000 tons.

WITNESS: It is 23,000 tons short on April 1. They are cleaning it up this month. In that letter I referred to the war conditions that reduced our output. In addition to what was mentioned in that letter with regard to war sacrifices, we had a great fleet of ships with which we were delivering our own coal before the war, but the British Government commandeered them and we were entirely taken out of the Montreal and Quebec market. We had to pay damages in Boston on account of the requisition of those ships. All through the war we were without them, and until recently we were not able to get them back, and we had to buy a great many in order to get them back at all. We always delivered it before, and in connection with that, there has been a question raised on account of the Canadian Government mercantile marine, and we have offered to sell them coal on board the Canadian Government mercantile marine. You cannot run mines unless you have boats at the loading piers every day or every other day, because the moment the coal becomes congested at the point of distribution the mine whistle fails to blow and men are prevented from working because there is no outlet for the coal they might produce. We have to control our boats if we are to carry on our mines. When we turn over our transportation of coal to somebody else we turn over one of the most vital operations of our company. I did not want to refer to costs very much, but Mr. Vaughan has done so, and I would like to state that the figures he has mentioned are perfectly satisfactory to us. He tells us he can buy American coal at the mine at a minimum of \$2.75 and a maximum of \$3. He tells us the railroad freight to lake Erie is \$1.95. That means f.o.b. vessel at lake Erie in the United States, a minimum of \$4.70 and a maximum of \$4.95, and

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with the exchange at 13 per cent it makes the f.o.b. price at lake Erie \$5.31 Canadian minimum and \$5.95 Canadian maximum. He states he would put the boat freight to Montreal at \$2.25. We will accept that as probable. There is a miscellaneous charge of probably five cents that he does not put in, insurance—

By Mr. Keefer:

Q. He put that in under the head of “Commission”—“Commission, 5 cents”?—A. I just said “Miscellaneous, 5 cents,” which is the smallest I can think of. Then the boat comes to Montreal and the lowest cost without investment that he can figure on for putting that coal from the boat to the cars is 40 cents. That is a duty of 53 cents, and when those items are added together his American coal will cost him on cars at Montreal a minimum of \$8.54 and a maximum of \$8.82. In addition, they take all the various risks of operation, that the coal will be delivered on the cars, that the American railroads will have plenty of cars, no strikes, and that it will get to Lake Erie, that all the other contractors will qualify, and that after they have watched them all the coal will be delivered, and I think that we as an independent company have never defaulted on a contract with them, but they have had many defaults on purchases of American coal.

In his testimony he stated we had asked him \$8.10 for our coal on cars at Montreal. The amount of the Montreal order is, I think, 100,000 tons, but I want to call attention to the fact that our offer is a minimum of 44 and a maximum of 82 cents less than he says he can buy American coal for. I know if that is so he is not going to buy American coal, but he is going to do business with us, and the question is why do not the Canadian National Railways close their contract and get the coal moving if it should be moving?

By Mr. Keefer:

Q. That is not the question?—A. This will all be worked out in proper shape. The other matter that has been criticised here was the fact that we asked \$7 f.o.b. vessel at Louisburg and \$6.50 on cars at Sydney. That precedent was established before, I think, when Mr. Cochrane was Minister of Railways and Canals.

By Mr. Keefer:

Q. What was the price at Sydney?—A. Seven dollars f.o.b. vessel and \$6.50 at Sydney, not at the mines. We have an investment in large loading piers at Sydney and Louisburg, and railroads, amounting to several millions of dollars, for which we are entitled to some earnings. We use our own cars, and in addition I would state that in the month of March the difference in cost of our coal f.o.b. vessels as compared with f.o.b. cars was over 50 cents a ton. Therefore, I think that in asking that price we have only covered our cost, and the matter is open to negotiation when we get around to closing up the contract.

By Mr. Douglas:

Q. In the month of March this year?—A. Yes, 54½ cents difference.

Q. Difference between what?—A. That is the difference between our cost f.o.b. cars at Sydney and f.o.b. vessel at Louisburg where we were loading in March. Questions will be asked as to why our costs have increased. In the first place, they have increased on account of the development we lost during the war, on account of the depletion of the near-shore areas and the consequent mining out at distant points, involving lost time in our labour going out there and coming back, on account of the cost of equipment and hauling and power, and the additional cost of materials and the freights on the same because of the cost of labour; and in connection with that cost of labour I feel it is only fair to say that we had a contract that expired on February 1 of this year, but our men took a strike vote and forced us to consider and

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negotiate a new contract before the termination of the existing one. These negotiations occupied a great deal of our time, and we should not have been made to grant the advance demanded, but we were practically driven to it by the Government here through its various ministers, by the people from Nova Scotia, and by the entire Maritime Provinces, because they gave us to understand that under no circumstances whatever must we permit a strike in these industries at that time, and so tie up the entire country.

By Mr. Cowan:

Q. When was this?—A. In November last year. We discussed matters with the leaders of the miners, and they were very reasonable in their discussions with us. The men expected a lot more, and were going to be difficult to handle, and I think these leaders discovered after negotiating with us for a while that we knew what was ahead, and they took back the scale they hoped to get put through. In fact, I believe they were rotten-egged at one place on that account, but I think they were trying to do the best they could after hearing our story. In connection with that advance, I want to say that one-half of it was absolutely given by the Minister of Labour, not by the Minister personally, but by his representatives there, and in our negotiations the Nova Scotia representatives and myself were absolutely averse to giving that additional amount, but we said that in order to keep the peace there, since the Government wanted it, we would do it if it was in the best interests of the country; otherwise it was against our good judgment. I am telling you this to show that while we have higher costs, the Canadian National Railways, the people of the Maritime Provinces, and the Government of Canada, are responsible with us for these high costs.

Q. When does the agreement terminate?—A. November 30.

By Mr. Douglas (Cape Breton):

Q. How much per ton has the cost increased as a result of this increase granted to the men?—A. The mines are so different that it would be difficult to give an answer. I would say from 40 to 75 cents at the various mines.

Mr. KEEFER: Let us get the whole statement completed before we start questioning the witness.

Mr. COWAN: Very well.

Mr. KEEFER: It is unfair to the gentleman who wants to make his statement.

WITNESS: When November 30 comes we will have to negotiate a new agreement. We want to carry out our agreement honourably. It may affect the amount of coal we can produce and sell, but our real fear is of the Dominion Steel plant lying idle with four thousand men unable to do any work because we cannot make steel. We want your sympathy, and we are trying to reduce costs. I think that is about all that I have to say. I would like you to try to look at this big idea if you can, that we would have proper returns on investments to take care of development work and provide additional money, and the only way that you can get an increased coal production is to make the coal business profitable for people to put their money in. So bear with us in the spirit that we are after a little profit and the development of the Nova Scotia coal mines, and investigate in every way you know with the idea of helping us and helping everybody. I want to get away from this if I can.

By the Chairman:

Q. To what do you refer by "this"?—A. "Merger insists on its pound of flesh."

By Mr. Keefer:

Q. You are quite right about that. That is a matter to take up with the newspapers. This Committee has had nothing to do with that.—A. I know that.

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Q. And there is nobody on this Committee who desires to do any injury whatever to your business, but it is our duty to get the facts, because there is a great deal of discontent on the part of the public, perhaps due to ignorance, and so you must also bear with us when we are trying to get at the facts?—A. The heavy railway deficits are causing a great deal of discontent among Labour and coal consumers.

Q. What quantity of coal per annum, on the average, does the Dominion Coal Company put out altogether?—A. The Dominion Coal Company put out about 4,500,000 net tons this year.

Q. Is the coal supply in Nova Scotia sufficient to provide for future years?—A. I think a couple of hundred years, probably.

Q. So we may take it there is an unlimited supply?—A. I think so, and increases in costs will occur as freight has to go farther for it.

Q. And could you increase the output from 4,000,000 to double that or more without much difficulty?—A. It takes some time to increase your output. I am not a practical miner, of course.

Q. If you had the market?—A. Mr. Keefer, last year at one of the directors' meetings I passed \$5,500,000 of profits in order to get these mines into shape,—new development work.

Q. So you are contemplating increasing your output?—A. I hope to see 10,000,000 tons per annum.

Q. Of the 4,500,000 tons you put out, how much do you necessarily have to use in connection with your operations? You have described a number of mills and so forth?—A. If our six furnaces were running we would use about 3,000,000 net tons of coal a year.

Q. So that at the present rate you would have only a million and a half for sale?—A. Yes, but we were running one furnace.

Q. But on your present output we could only look from your supply for about 1,500,000 tons for the market if you were operating at full capacity?—A. We have never operated the six furnaces at one time. We have been trying to get the plant in such shape that we could do so. I do not think that for several years to come we would ever have more than five working at Sydney at one time, and we hope for a material increase in coal every year, and when I say 4,500,000 tons this year, it is a great increase over last year, and it is the result of this money we are spending in getting the properties into shape again.

Q. But is the 3,000,000 tons deducted from that reasonably expected to remain constant?—A. No, it is not reasonable to expect it to remain constant in the steel industry.

Q. It will be less, I suppose?—A. Yes.

By the Chairman:

Q. How much did you use last year?—A. About 1,000,000 net tons.

By Mr. Douglas:

Q. Is that last year?—A. Yes.

Q. I thought you gave it in the letter you read.—A. No, that letter was in 1919

By Mr. Keefer:

Q. You have, as is customary, to supply your own miners with coal at a reasonable price?—A. Yes, we are giving them our coal at \$1.50 and it costs \$6 or \$7 to get it for them.

Q. How many tons of coal are required for the purpose?—A. It figures out a seven cents per ton difference in coal cost on our mileage output.

Q. You cannot give me the quantity they use?—A. Approximately 60,000 to 80,000 tons.

Mr. HENRY: About 75,000 to 85,000.

[Mr. Roy M. Wolvin.]

By Mr. Keefer:

Q. How much did your furnaces use?—A. It depends entirely on the steel industry.

Q. I mean approximately.—A. If five furnaces were running, our furnaces and power plants at the coal companies, and everything combined, 150,000 tons a month would be used, say 2,000,000 net tons a year.

Q. I suppose that is all covered by that contract to which you referred?—A. It is covered by the contract and by the fact that it is all one company.

Q. But prior to this it was the one company?—A. Yes, in 1900 sometime.

Mr. HENRY: In 1899.

By Mr. Keefer:

Q. And the price?—A. The price was \$1.55.

Q. How long has it to run?—A. I think it runs forever.

Q. So the public must face the fact that the steel industry is bonused to about five per cent?—A. Yes.

Q. And therefore what the public have to look at is that in the market price of our coal this difference must be made up?—A. Either that, or in some way by means of joint operation of the properties, so that a reasonable return may be made on the joint investment.

Q. It is all one now?—A. Yes.

Q. And you are going to continue to supply that coal to the steel industry at that low price and charge the railways and other consumers a high price?—A. It washes out in our other accounts.

Please just say yes or no. You get your iron from Newfoundland?—A. Yes.

Q. And you carry back coal, I suppose, in return cars?—A. In order to get permission to export ore from Newfoundland we have had to enter into an agreement with the Government of Newfoundland to supply them with coal. It is not a large consumption.

Q. And you have to give it to them at a low price?—A. Our arrangement is that we may give it to them at the same price as we get f.o.b. vessel from Nova Scotia or Quebec.

By Mr. Cowan:

Q. That is coal to the railroad?—A. No, I think the railroad is excluded, but they get the same price.

Q. Let us be clear on that. You supply coal to Newfoundland at the same price as you supply coal on vessels at Sydney and Louisburg harbours?—A. Yes.

Q. The coal to whom?—A. The coal for any purpose; that is our regular price for coal. For instance, if we quoted some person at a Nova Scotia port who asks us to load a schooner, the price we are asking on that coal governs the price to Newfoundland at that time.

Mr. KEEFER: That is none of our business.

WITNESS: Those are details of our business.

By Mr. Keefer:

Q. We are discussing your supply of coal to Newfoundland and you are getting your supply of ore from Newfoundland, and it is natural for you to supply them with coal as cheaply as you can?—A. Yes.

Q. When you sum it all up roughly speaking there are 3,000,000 tons of coal?—A. Yes.

Q. Which your mines consume and what you have to use in your steel plant to supply your working operations and it only leaves a couple of million tons for the market?—A. Ordinarily.

[Mr. Roy M. Wolvin.]

Q. When the steel mill is not operating, would not that therefore reduce the price? Why should it not? You do not have to supply it at \$1.60?—A. We would take the profit on that coal in the price of steel.

Q. You are working on a contract of \$1.55, which is either a subsidy to the Steel Company, or based on whatever we will call it so that the profit will go to the Steel Company when not operating?—A. It will go to the Dominion Steel.

Q. It was ostensibly made to supply it with coal when they are not operating the steel mills?—A. Yes.

Q. You say it takes \$25 worth of coal for a ton of steel?—A. For steel rails, about four and one quarter tons.

Q. How do you make \$25 of that?—A. I say the whole thing is a consolidated operation and we do not go to work as a Dominion Steel Corporation and sell a ton of rails so as to throw money away. The real basis is what the coal is costing us.

By Mr. Cowan:

Q. In other words you are simply bonusing this Steel Corporation to the extent of some millions of dollars a year?—A. If we are, we are taking it out of one pocket and putting it in another.

Q. You are charging it against the coal the ordinary person buys, because you must make a profit? And your profit includes the loss on the coal you are supplying the Steel Company?—A. In other words the coal is not sold to them. If the Steel Company were not running we would close the works down.

By Mr. Keefer:

Q. In the steel plant, do you also include a plate mill?—A. Yes.

Q. That is not operating now?—A. No, sir.

Q. That was under some contract with the Government?—A. We had a five-year contract, and they gave us notice to stop rolling.

Q. After how long?—A. We did not get the first year's contract quite finished. Of course you must get the idea that any time such a contract is made the cost is considered. That is why of course we had to get together.

Q. We want to see why that is, why this coal has to be so high when they can get the lower price elsewhere.—A. I think you have the wrong idea. You are leading to the idea that we charge the public of Canada something to subsidize the steel industry.

Q. The fact is that you are under contract to sell to the Steel Company very large quantities of coal, whatever they need, at the price of \$1.65?—A. \$1.55.

Q. Per ton?—A. Yes.

Q. And the fact that if the steel mills are not operating, the steel corporation are entitled to that coal, you sell it to us at the advanced price?—A. The Dominion Coal Company does not furnish it.

Q. Who gets the profit, which company? Supposing they were separate?—A. The Dominion Iron and Steel Company has not any contract for any coal except for the purposes of steel.

Q. Therefore the coal they do not need to operate their mills should go to the public?—A. Yes.

Q. Should it go at an increased price?—A. It should go at the cost price.

Q. Therefore it should go at a decreased price?—A. It should.

Q. You do not have to charge up to the market price this large quantity at a lower price?—A. That is clear.

By Mr. Cowan:

Q. This \$1.55 is it at cost price or are you selling it to them at a price lower than the cost of production?—A. That is why the companies are together because it was more important for them to operate and it was the intent to equalize and take care of the investment. They had to get together in order to be able to carry on.

[Mr. Roy M. Wolvin.]

Q. The fact is you are charging to them \$1.55 and to other customers about \$7. There is an awful spread there.—A. They are the same customers, just from one pocket to another. There is not another corporation except the Dominion Steel interested in that company.

Q. The point is this: The Steel Company is holding the Dominion of Canada up on the price of rails. We want to know why?—A. You do not get the principle, because we do not collect from the people of Canada to pay a subsidy to the Dominion Iron and Steel at all. It can be considered in some such light as that. We do not collect one dollar from anyone in Canada to turn over to the Dominion Iron and Steel Company. We operate our entire operations on a business basis.

Q. If this coal is supplied at a figure less than cost, then you must make up the difference on the coal that you are selling, otherwise to the public which means you must be charging them a higher price than is necessary.

Mr. KEEFER: The dividends of the company when they are not operating have to be paid out of the coal.

Mr. COWAN: Dividends and wages.

The CHAIRMAN: I think it is only fair to the witness to have one questioner question him at a time.

By Mr. Keefer:

Q. That contract with the Steel Company at \$1.55 was in force in 1912, 1913, and 1914?—A. Yes.

Q. Do you know what you were selling the railway coal for at that time in Montreal, your prior company?—A. No, I do not.

Q. We had a witness yesterday, Mr. Caye, who stated he bought coal from you delivered f.o.b. Montreal, 400,000 at \$2.92½. He bought from you and the delivery was completed, delivered in Montreal. In 1913, the quantity was 400,000 tons at the same price. In 1914, when the war broke out, the price was \$3 per ton for 450,000 tons. Are you aware of those figures?—A. No, I am not. I assume they are approximately correct though.

Q. Would you explain to us at that time whether the steel mills were operating or not?—A. I could not tell you that. I was not there, I could not remember.

Q. You could not tell how it was that the coal was brought up to Montreal at that low price as compared with \$8 now?—A. It was based on what they could bring it up for, competition, price and those things.

Q. When you say "cost" you enter into wages, overhead material and interest on your money borrowed, and reasonable dividends. Now, in that detail of course you take what capitalization, the coal company's plant, or the entire amalgamation?—A. We do not take that into our cost when we are negotiating a sale, as a rule. Any fixed capitalization is anything we need ourselves. I would be frank to say that the price we are asking for coal this year would not include such things.

Q. They could not as a matter of fact?—A. They should but under the conditions will not.

Q. What is the total capitalization?—A. About \$100,000,000 represented by bonds and preferred stock.

Q. About \$101,000,000?—A. It is very close to \$100,000,000.

Q. That \$101,000,000 of bonds and stocks was exchanged for what? When was this?—A. Do you mean for the British Empire Steel? I am talking about the Dominion Steel Corporation.

Q. That is the capitalization of the Dominion Steel Corporation is it?—A. Approximately, yes. I say the amount invested.

Q. What do they own?—A. I gave a pretty good list of that.

Q. Approximately. Mines, ore mines, steel plants?—A. Yes.

Q. Steamships, docks?—A. Docks, railroads, houses.

[Mr. Roy M. Wolvin.]

By Mr. Cowan:

Q. May I ask this question? Is this British Empire Steel Corporation Mr. Keefer is asking about the Dominion Iron and Steel Company?—A. I am answering for the Dominion Steel Corporation.

Q. What companies do the Dominion Steel Corporation own?—A. The Dominion Steel and its subsidiaries own a large iron ore deposit in Conception Bay.

Q. Never mind iron. We are more concerned with coal.—A. Twenty-one coal mines.

Q. Among others in that 21, the old Dominion Coal, is that right?—A. That is the subsidiary that owns all the coal mines.

Q. We will trace it down to the subsidiaries. The Dominion Steel has several subsidiaries. How many?—A. The Dominion Coal Company, Dominion Iron and Steel, the Cumberland Railway and Coal Company and some smaller ones that are not of importance, I think.

Mr. DOUGLAS (Cape Breton): I think it would perhaps be just as well to have just a little more detail in regard to that. We are asking for the constitution of the company.

By Mr. McKenzie:

Q. I do not think we quite understand the effect of this contract business Mr. Wolvin gave. I think it is very badly mixed between the Dominion Coal and the Dominion Steel companies. They are two separate and distinct corporations, is that a fact?—A. Yes.

Q. And during those years when they were two separate and distinct corporations this contract that was spoken of was entered into?—A. Yes.

Q. That is, the directors of the coal company undertook to supply coal to the Dominion steel when it was a separate company altogether, is that not a fact?—A. Yes.

Q. Then they had a big law suit about the contract, is that not a fact?—A. Yes.

Q. And after that law suit was settled they got together?—A. That is as I remember it.

Q. Two in one?—A. Yes.

Q. Whether this contract is in existence or not, is not that a mere nominal thing?—A. Yes.

Q. It is the same household, the same company, the same people all around. So to talk of what you are giving yourselves coal for does not mean anything?—A. It is very misleading.

By Mr. Keefer:

Q. I am asking you why when they are not wanting that coal we do not get it at a lower price.

Mr. MCKENZIE: It is the same concern. Supposing you were the man yourself, it is the same concern.

By Mr. Keefer:

Q. By your statement you will show that the contract was only for the coal as used by the steel company.—A. As I remember it, it was only for the requirements of the company.

Q. When the company does not require it, it should be for the use of the market at a profit for that company.—A. That is as I understand it.

Mr. DOUGLAS: The witness has said that the Dominion Coal and the Dominion Iron and Steel are the same. I want to ask this witness if it is the same persons that have invested in the stock and bonds of the Dominion Coal Company and the same persons that have invested in the Dominion Iron and Steel?—A. I do not know who owns the bonds of the Dominion Iron and Steel or the Dominion Coal Company.

[Mr. Roy M. Wolvin.]

The bonds known as Dominion Coal Company bonds are secured by mortgage on the properties originally owned by the Dominion Coal Company. The bonds known as Dominion Iron and Steel are all secured on the properties formerly called Steel of Canada; after that by the Dominion Iron and Steel. In other words the outstanding bonds of the companies were never disturbed. I do not know who owns them, whether they are the same or not.

Q. So in point of fact they are not the same. It is not the same people that are interested in both corporations?—A. That is the bonds. But if I had title to all those properties in the Dominion Steel, I might put a mortgage out on the coal mines and another mortgage out on the steel plants. It is to the same effect.

Q. We are dealing with Dominion Coal and Dominion Iron and Steel?—A. And Dominion Steel Corporation. It is hard to deal with them, because they are one.

Q. That is the question we are asking. Are they one? But I think I understood the answer, which was, that you did not know who these persons were who own the bonds of the coal company, nor you do not know whether it is the same persons who own the bonds of the Dominion Steel Company.—A. No.

Q. You do not know whether the shareholders are the same in the case of Dominion Coal as in the case of Dominion Iron and Steel?—A. All the common shareholders are identical.

Q. Since when?—A. Since the consolidation of those companies a good many years ago. Every share of stock of the Dominion Iron and Steel and every share of stock of the Dominion Coal were exchanged for shares of the Dominion Steel Corporation.

Q. All I wanted to establish was that the corporations were two, and separate and distinct corporations and that persons invested in Dominion Coal on the strength of what they considered the value and prospects of the coal company in one case, and in the case of the Dominion Iron and Steel the prospects of what they thought would be the successful making of steel and the two corporations are distinct as far as that is concerned?—A. As far as the bond-holders are concerned.

Q. When this agreement was made that you have reference to, \$1.55 per ton, that is all I wanted to establish and have it on the record.

By Mr. Keefer:

Q. The consolidation you spoke of approximately took place when?—A. 1919, I think.

Q. So that even after that consolidation they were able to deliver coal to the Grand Trunk Railway in 1912, 1913 and 1914?—A. Yes.

Q. There has been another consolidation recently, I think what you call the British Empire Corporation, and that is an amalgamation of not only the Dominion Steel and Iron, but what else?—A. That takes in the Nova Scotia Steel and Coal and Halifax Shipyards.

Q. Anything else?—A. Nothing except their subsidiary companies.

Q. The Halifax Shipyards consist of what?—A. A shipbuilding plant, grading dock and so forth?

Q. Do they own any docks or lease them?—A. They lease it from the Dominion Government.

Q. Does it pay the Dominion Government a subsidy?—They pay the Government for it. They pay rental for it.

Q. It was taken at that plant, I suppose, in Halifax, where the ships for the Government were built?—A. Yes.

Q. Now the capitalization of the amalgamation called the Empire Steel is what?—A. I did not come prepared to answer on that. I did not think there was anything doing except the future supply of coal. It is quite commonly known.

Q. We want to dispel from the public mind that you were charging up profits of a large corporation on coal or something like that. Now one way we can do it is to get the papers.—A. I have not got the statement here. I think it would be proper for this Committee to have such a statement.

[Mr. Roy M. Wolvin.]

Q. Do not think for a moment we want to get anything that will be detrimental to the company.

The CHAIRMAN: Could we not perhaps get that information by abbreviating this examination?—A. I would be very glad to furnish a statement for your record.

Q. And also showing how much is issued?—A. Yes.

Mr. DOUGLAS (Cape Breton): We can get it up now.

Mr. KEEFER: I think it is of great benefit to the company to disprove those statements for the newspapers.

The CHAIRMAN: I do not know that we are very much concerned about meeting all the criticisms of the newspapers, but we are all concerned about the future supply of Canada, and I think it would be better to adhere to that line of examination.

By Mr. McKenzie:

Q. Upon that point the Chairman suggested the future supply of coal for Canada. You, as an experienced business man know that coal is very vital for many industries, like paper, like salt, and like cement, and in fact almost all the whole industrial life, so the whole industrial life of Canada is dependent on coal, so therefore we are very interested nationally in getting coal at a cheaper price. Take as an example, do you know how much coal is used to make a ton of paper?—A. No, I do not know.

Q. You never followed those things up?—A. No.

Q. With that in view it is natural that your company, wanting to retain the good-will of the public which any company must have, will meet that situation as far as you can?—A. Yes.

Q. Therefore, we are interested in getting the exact data?—A. Yes.

By Mr. Keefer:

Q. Can you give us the reasonable cost per ton of those 4,500,000 tons of coal?—A. I rather think we should be rather slow in giving our real cost, Mr. Keefer.

Q. It was the holding of the Committee yesterday that the Grand Trunk had to do it in their mines in Pennsylvania?—A. I think I noticed in some newspaper that they stated their price was \$2.30 at the mine, which included profits, is that right?

Q. Yes.—A. It looks like a Grand Trunk profit to me. I am pretty familiar with what it costs to produce coal down there in a general way. I am very much surprised because Mr. Vaughan states that he can buy it at a minimum of \$2.75 and a maximum of \$3. It is surprising they can produce profitably at \$2.30 and that price be maintained.

Q. Coming back to my question can you tell us what that 4,500,000 tons of coal would cost per ton?—A. Our March coal without any profit to the company cost us \$7.53 a ton.

By Mr. Douglas (Cape Breton):

Q. How many days did you work?—A. About 200,000 tons output.

Q. Yes, but how many days did you work?—A. I do not know. I would say two-thirds of the month.

Q. Is not that absolutely an unfair method to take with the mines working not more than half-time in March?

By Mr. Cowan:

Q. The witness said they could produce at \$2.30 and one of the reasons was they had a steady market that they took all their own output. As a result of that they could produce at a much lower rate. Would that not be true in your mines?—A. Yes, excepting we had more expense on account of overhead and such charges as that when the mines are running. Our mines have been running pretty well full-time. In March production in Cape Breton is two-thirds of a full month anyway. In January our production was much more than two-thirds.

[Mr. Roy M. Wolvin.]

Q. I understand there is a standard rate of wages for miners?—A. Yes.

Q. I presume you are paying them the same in your mines as in the States?—A. No, we do not have the same scale of wages at all. There is no standard rate between the United States fields and the Cape Breton fields.

Q. Are you paying higher wages on this side than on the American side?—A. We are not paying as high wages per day as in the American field, but our miners make more money than the miners in the American field because they get steady employment.

Q. We had a witness yesterday who said there is a greater difficulty in Alberta than in Nova Scotia, and yet they are producing coal in Alberta at less than you are producing it.

The CHAIRMAN: Will the members of the Committee confine their questions to matters which Mr. Wolvin refers to?

By Mr. Keefer:

Q. When the members are questioning the witness, whether it is Dr. Cowan or Mr. Douglas or myself, if the questions are interrupted, you switch off the whole trolley. Well, speaking again on the question as to the cost of the 4,500,000 tons you say it is what? \$6, and some cents?—A. I said our March costs were \$7.53.

Q. Do you compute in that quantity for the mills at the \$1.55 price?—A. No, that is our average cost of production of coal.

Q. That is the actual cost of taking it down?—A. Yes.

Q. And with no reduction for what you allow to the men or anything of that kind or what you consume yourselves?—A. No, it is just the average cost of coal.

Q. And arriving at that cost—how do you do it? What do you take into consideration? Just generally—we don't want the details?—A. Wages and materials and various different little charges.

Q. How much per ton for wages?—A. I have not those figures.

Q. Nor for material?—A. No. As I started to say I really feel that it would be much better if we did not give this analysis here—

Q. If we do not get it from you, to whom may we look for that authority?

The CHAIRMAN: Will you please let Mr. Wolvin finish his sentence?

WITNESS: I would think that is rather important. Apparently it has been decided that this information should be given. I think it is a very serious question to have this information made public. I would respectfully suggest that before any of these things are made public they give it their very serious consideration. If the Committee want it we can give it to them in the shape of records for private use, that may be used in reaching a conclusion, but not made public.

The CHAIRMAN: The Committee has not definitely decided to ask for the costs. We excused the Grand Trunk Company from giving definite statements as to the cost of production of the coal.

Mr. KEEFER: If we cannot get this information how can we arrive at a conclusion?

Mr. COWAN: We cannot suppress any evidence. I do not see why we should have any secrecy about these matters.

Mr. ROSS: I think we should get the cost of this thing. We have to get the cost. The Grand Trunk did not tell us what their profits were. The Grand Trunk did not tell us their profits. They told us it cost them \$2.30 at the pit mouth for their coal.

The CHAIRMAN: Which included their profits.

Mr. DOUGLAS (Cape Breton): Yes, which included their profits.

The CHAIRMAN: We accepted that statement.

Mr. ROSS: Yes, we accepted that statement.

[Mr. Roy M. Wolvin.]

By the Chairman:

Q. Would that be satisfactory to you?

Mr. Ross: That would not get us any place. If these people tell us that they charge themselves \$2.30—

The CHAIRMAN: We must establish a rule for all operators. We accepted that statement from the Grand Trunk yesterday. Are we going to accept a similar statement from this company and future companies, or are we going to proceed on a different basis?

Mr. Ross: How can we arrive at any conclusion in this Committee unless we get this information—

The CHAIRMAN: I am not arguing the point—

Mr. Ross: But I am arguing it, before you and before this Committee, if we are going to find out that the people of Canada are being charged a fair price for their coal, we must find out the cost. They claim they are paying big wages to the miners, and that may be true, but we do not know whether these people are getting three or four times the profit they did in times past, and we cannot tell that unless we find out if this merger's overhead and large salaries are entering into this cost of \$6.72 a ton.

Mr. Cowan: I think we ought to find out if the miners are getting extensive wages. If we do not we cannot come to any conclusions. We must find out also if the company is making excessive profits. If the excessive wages are the cause of it, we want to find it out.

Mr. KEEFER: I think the true solution, Mr. Chairman, of this matter is this: We are here representing the high court—Parliament; we are here representing the public who are vitally interested in this whole question. We are here also to represent Mr. Wolvin's company, and to do no injury to that company—

Mr. Cowan: We don't want to.

Mr. KEEFER: Wait a minute. In order to make a proper report we must have—whether confidentially or not I care not—but we must have the data; otherwise our report is useless, but it may be, and I think it is very reasonable, that any information which the company desires not to be made public could be given to us first in a privileged manner, and I think the companies can rely on our fairness not to abuse that confidence. I think we ought to get that data. I agree with Mr. Wolvin that this should not be made public, but if this \$6.72 is showing an abnormal profit to the owners we must take that into consideration, just as we have to take into consideration any abnormal prices to the wage earner. How will you get it otherwise?

The CHAIRMAN: It is for the Committee to decide. Have you any motion to offer?

Mr. KEEFER: I think perhaps we can pass that. Perhaps we had better go on with the understanding that Mr. Wolvin will supply us with the details, and then if we are not satisfied with those we will have the right to call him back and question him further upon it.

WITNESS: That is satisfactory to me.

The CHAIRMAN: What is the wish of the Committee? Let us decide this matter now.

Mr. DOUGLAS (Cape Breton): How can we get this information in this secret confidential manner and still use it? If we make a report on it we will have to say so-and-so, and so-and-so, and so-and-so, and surely we would have to divulge this. I think the Committee should get this information. I do not want to injure Mr. Wolvin's company, or any other company, or any institution, as they are doing as great a national work as this one, nor do I want to see them make too much money out of the people. That is all. I think they are doing pretty well.

[Mr. Roy M. Wolvin.]

The CHAIRMAN: Has any member of the Committee any motion to make so that this matter may be decided?

Mr. COWAN: It seems to me that the fact that Mr. Wolvin has suggested that he does not want this to be made public will lead the public to believe that he has something he wants to conceal, and in the interest of his own company I do not think this should be done. I move that the company be required to produce information in the shape of evidence in regard to wages and profits which this Committee desires.

Mr. KEEFER: Costs, you mean?

Mr. COWAN: Yes, costs.

Mr. KEEFER: Reasonable costs.

Mr. ROSS: I don't think I quite get the spirit of that motion. I hope the Committee understands it.

The CHAIRMAN: Dr. Cowan, will you repeat your motion?

Mr. KEEFER: In order to bring this matter to a head I will move that Mr. Wolvin do furnish, if not already prepared to do so, a statement of costs to the Chairman upon which if we desire we can further examine him.

Mr. DOUGLAS (Cape Breton): If you do that for Mr. Wolvin you must do it for all of them.

Mr. CHISHOLM: We will have to get back this Grand Trunk witness.

Mr. DOUGLAS (Cape Breton): I think he should come back anyway. It seems to me there are some points to be cleared up there.

Mr. KEEFER: I thought he gave us that statement.

Mr. CHISHOLM: No, he said that there were profits, but he did not tell us what the profits were.

Mr. COWAN: I think probably he did.

Mr. KEEFER: I thought he did.

Mr. DOUGLAS (Cape Breton): I understand he did not give the profits. He said the price at the mine is \$2.30 and there was a profit.

Mr. COWAN: That is in the statement.

Mr. CHISHOLM: I was watching for that very carefully—

The CHAIRMAN: My recollection is that we did not press him to give the actual cost.

Mr. DOUGLAS: He handed in a statement—

Mr. COWAN: Which shows the profits.

Mr. KEEFER: The first refers to what is in that statement.

Mr. CHISHOLM: I don't know anything about it. I did not see the statement.

Mr. KEEFER: It was handed in.

The CHAIRMAN: In the meantime can we continue the examination of this witness and let the Committee decide the matter when we are fully seized of the situation?

Mr. DOUGLAS (Cape Breton): As it stands now the witness has given the cost for the month of March?

The CHAIRMAN: Yes.

Mr. DOUGLAS (Cape Breton): The cost of coal to the Dominion Coal Company.

WITNESS: F.O.B. vessels for the month of March \$7.33.

Mr. DOUGLAS (Cape Breton): The point I make is this in connection with that matter: the most favourable time that the company could possibly show excessive costs was the month of March this year, and I have no doubt for ten years. I do not know whether Mr. Wolvin may remember that far back, as far as the company is

[Mr. Roy M. Wolvin.]

concerned, but certainly since he has come into office this is the largest cost of the coal for the reason that the mines have been working only two or three days per week. I think that the natural inference, with the snow and other winter conditions—if this Committee is going to go into the question of cost, and if we are going to take the most unfavourable month, and have that in the records, we must have something in the record to show that the cost at other times was less than this.

WITNESS: I would like to add in addition to this that during March we had to put coal on the stock pile in order to supply labour with something to do. That was not coal that we sold, but we were simply trying to keep our mines working and keep our people employed and give everybody some work to do. This is a peculiar situation that we are facing.

Mr. DOUGLAS (Cape Breton): The trouble is that the men have not all been at work.

WITNESS: If it were not for our stocking this coal the men would not have had any work.

By Mr. Douglas (Cape Breton):

Q. Are the mines at work to-day?—A. I have not heard this morning—we get the output by wire each day for the previous day. This comes in every morning. I noticed to-day a despatch in the paper that the people down there were happy when the whistle blew unexpectedly on Monday morning and the men were called to work. Our vessels are beginning to come in, and I understand we have one vessel already moving to Montreal.

Q. Can you open up the mines and keep them going full blast? If not, when can that be done?—A. It is a pretty difficult problem. We have to depend on our coal sales as we make them.

Q. And it is a difficult problem for the 15,000 men who are employed by your company when they are only working one or two days a week?—A. Sure. I tell you it was a mighty difficult problem for this company when we ran our mines three days a week when we did not need to in January, February and March, and cost us a million and a quarter dollars, so that we could give some of the men work, or try to give all of the men some work when we did not need the coal. I tell you it is darned serious, and our back is bent trying to finance all these things.

By Mr. Cowan:

Q. Would you get rid of that trouble if you were to expedite the arrangement which the Canadian National is trying to make with you, that is, this contract which they want? They are trying to come to an agreement with you and you are seemingly trying to delay the time of the completion of it. Would it not get rid of a lot of this trouble if you were to accept and start in to fill this contract?—A. I spent an hour last night on this contract business. We are moving coal. We have to get our coal and operate as economically as we can. These are difficult times, and the fact that this contract has not yet been signed really makes very little difference, because as yet not one ton of coal has arrived where the Canadian National can take it.

Q. If you had this contract you could start on it sooner?—A. The Canadian National is taking coal at the present time, all through the month of April, from us. There has been no delay in the Canadian National taking its coal.

Q. Your statement at the beginning in regard to the negotiations with the Canadian National has created rather an unfavourable impression with me. Undoubtedly in the past the Canadian National has attempted to purchase coal from you and you have opened up negotiations with them and you said that you finally got in touch with Mr. Hanna and it was quite easy to settle. Now, this year, you are negotiating through the same departments. Why are you waiting for Mr. Hanna to come along? Is it because Mr. Hanna is an easy mark?—A. I hope not. You would not suggest that if you had to deal with him. I was in hopes that this matter might have been

[Mr. Roy M. Wolvin.]

concluded last night, although Mr. Hanna would undoubtedly have left it to his purchasing department to conclude, but he wanted to see me last night, and I wanted to see him, and in the course of our discussion the question came up of the advisability of trying to make a five years' contract.

By Mr. Douglas (Cape Breton):

Q. Is that the first time it came up?—A. That is the first time it came up. Well, we have mentioned it at various times. I mentioned in my letter that we wanted to make a long-time contract.

By Mr. Cowan:

Q. You say you are expecting wages and the cost of living to come down, one with the other; how are you going to base that five years' contract—on the present wage schedule?—A. We will have to try to work that out. We are to get together in two or three days and consider something of that kind, and then he will put his department to work. There are various ways of handling it. One is a fixed price where each one takes a chance, which he does not want, and which I am very sure we do not want to consider, but I think it is possible to base it on the cost of coal, they to get the benefit of any reduction and to pay any increases.

Mr. Ross: That is fair enough.

WITNESS: When a man asks you for a proposition at a quarter of ten and you are taking the ten-thirty train, I am not competent to make that proposition to him; our operating and sales departments have to get busy and prepare it.

By Mr. Douglas (Cape Breton):

Q. Negotiations in respect to a six hundred thousand-ton contract have been going on for some considerable time. That is coal only for this year?—A. Yes.

Q. Now, it has taken a new aspect, and when the question of the five-year contract has come up for the first time I think it is safe to assume that with all the difficulties and all matters that have to be considered in the five-year contract that these negotiations are likely to be protracted, particularly so when the negotiations were so protracted for the contract this year. That is a correct inference? That is, it is going to take some time, but what can be done to put the employees of your company to work now? What can be done at the present time? You are assured, as I understand it, that the railway wants the coal, and it is only a question of getting together on the price and terms, but they want a large quantity of coal. What can be done with a view of ordering your company at Glace Bay and Sydney and North Sydney and Sydney Mines that the men be given steady employment at once? What can be done in that direction? What are the difficulties why it cannot be done?—A. Well, that is something that is pretty difficult for me to answer, Mr. Douglas—

By Mr. Keefer:

Q. Here is what the railroad says. It would help you to answer it—

The CHAIRMAN: Just a minute, Mr. Keefer—

Mr. KEEFER: This gives the exact figures. (Reading)—

“What is the total requirement of Nova Scotia coal as appears by your estimate?

“A. The estimate which we have made for Nova Scotia coal is 1,650,000 tons.”

WITNESS: The proposition is for 475,000 tons of coal and not 600,000.

By Mr. Douglas (Cape Breton):

Q. About 125,000 is for the Nova Scotia Steel.—A. 600,000, of which they say they reserved 125,000 for the Nova Scotia Steel Company. I have never discussed a Nova Scotia contract with anybody, and I know nothing about it. Some of these days we will all be working on the same thing—

[Mr. Roy M. Wolvin.]

Q. Let me see if I understand this. Did you never discuss a Nova Scotia contract—A. We have never had any negotiations of any kind with the Nova Scotia Steel Company.

Q. The companies are operated separately?—A. Yes, but until we get organized there will be no negotiations, but I am only now looking at the 475,000 which I discussed with Mr. Hanna last night, but I think when we get that five year contract it will involve a larger amount of coal. Let me try to speak about the movement of coal. I cannot say as to the continuous operation of the mine, as we have to get our boats there and get them to work.

Q. Where are they now?—A. We have one ship en route from Europe, which will be here in a few days. I have word that we have one now en route to Montreal—

Q. Give us the names of the ships and their carrying capacity, and where they are?—A. The "Lord Strathcona" is reported loading Monday for Montreal and is probably en route. I cannot remember the names of all these boats.

Q. Where is the "Rose Castle"?—A. The "Rose Castle" is due within ten days to load. She is en route from Rotterdam. The "Wabana" is leaving England in a few days, and there are several of our general boats in the vicinity.

Q. In the vicinity of where? Of Sydney?—A. Yes, and then we have some at Halifax being overhauled and getting ready for the summer work. You see, Monday was the first day we had the right to try to load boats, and they cannot get out on account of the ice.

Q. Was there not a boat came up from Montreal on the 15th?—A. Yes, the steamship "Minola" came from St. Johns, Newfoundland, and arrived—I do not know whether it was the 15th or not, I think it was the night before last. One of our little boats with steel on it is en route up. A coal boat was to leave on Monday night, but I heard on Tuesday they were unable to get out on account of the ice. I wanted to know what the chances were of immediately getting the mines in operation and giving work to the 15,000 employees in Cape Breton. There is a lot of orders for coal. If you take 475,000 tons of coal and spread it over a period of seven months it is not such an awful lot of coal.

Q. In addition there is the 150,000 tons—A. From the Nova Scotia.

By Mr. Keefer:

Q. Here is what the statement says—I will give you the exact phraseology.

By Mr. Douglas (Cape Breton):

Q. 125,000 tons from the Nova Scotia, and 150,000 also of rail coal at Sydney?—A. Yes, but they did not take any rail coal from us. I should be careful in these statements, because I am not posted as I should be, but in the summer time—

By Mr. Keefer:

Q. May I give you Mr. Vaughan's statement?

"Q. I think you stated the intention was to take 600,000 tons of water-borne coal from the Dominion Coal and the Nova Scotia Steel Companies, and about 150,000 from Springhill—that is the same company.

"A. Yes.

"Q. And 150 from the Dominion on rails at Sydney.

"A. Yes.

"Q. As well as this 200,000 tons?

"A. Yes."

Q. They wanted coal badly?—A. They told me in the negotiations in the last three weeks that they had a coal supply sufficient for two and a half months ahead at the present time.

Q. It is good business to keep that in case of a strike. They don't want to disturb that, but they want coal?—A. The only answer I could make to Mr. Douglas

[Mr. Roy M. Wolvin.]

would be that we are anxious to run our mines if we can do it. All that coal, the 300,000 tons going to Montreal, will be moved by the Canadian Government Merchant Marine. Their boats are ready, and as soon as they get it that coal will be moved and our boats are going to move all they can. One problem I have to face at the present moment—

Mr. KEEFER: Coming back—

The CHAIRMAN: Let Mr. Wolvin finish his statement.

WITNESS: What we want more than anything else is about \$1,250,000 that is tied up in a stock pile of coal. It was piled there to keep the men busy, and there is no one in Canada helping us to carry our great big inventories, pay-rolls, and everything else at the present time, and in all probability that stock pile will have to be moved.

By Mr. Douglas:

Q. How much coal does that stock pile contain?—A. About 170,000 tons.

Q. Will you dispute this fact, that it has not been unusual for the same company when it was only the Dominion Coal Company and not part of the British Empire merger, to have as much as 400,000 tons of coal in the stock pile?—A. Yes.

Q. Could that not be done now?—A. It is pretty hard to finance it.

Q. I think there is a financial statement of the British Empire Steel Corporation here.—A. I do not think that will help you. It is as of December, 1919. The question of financing depends upon whether the bank will let you have the money.

By Mr. Cowan:

Q. It is a case of banking?—A. Yes, and also a case of tremendous inventories that we took over.

Q. Are the banks putting the screws on you any tighter than they did?—A. No; it is a question of financing.

By Mr. Douglas:

Q. Do they lack confidence in your organization?—A. No, but they seem to lack money. The financial situation is very, very serious in this country, and these big companies are having a terrible time in order to take care of their ordinary business, and it is nothing to the discredit of any company to endeavour to secure finances, but the banks will not allow them to lean on them.

Q. Coal mining companies always borrow money when they bank coal?—A. Yes, but there is a great deal of difference between banking coal at \$2 a ton and \$7 a ton.

Mr. KEEFER: Mr. Chairman, may I come back to the question of the—

The CHAIRMAN: The Committee evidently are not prepared to come to a decision. We are proceeding now on the policy we adopted the other day in connection with the Grand Trunk and whenever the Committee is prepared to make a decision it will be made.

Mr. KEEFER: What was the policy we were proceeding on in connection with the Grand Trunk?

The CHAIRMAN: The actual cost of the coal was given by the Grand Trunk witness.

Mr. KEEFER: The evidence is as follows:—

“Q. Is there any profit on that?—A. Yes, that includes our profit.

“Q. About what percentage did you have in profit?—A. Well, now you get me into that same question again.

“Q. Do you mean on the mining of the coal?—A. The profit of the Grand Trunk road.

“(To the Chairman): I must ask that this statement be filed.

“The CHAIRMAN: Of course, it is evidence.

“WITNESS: Then it becomes public property.”

He put in the statement.

[Mr. Roy M. Wolvin.]

Mr. COWAN: He put in the statement, and that is the reason I dropped any further reference to it.

Mr. KEEFER: I ask that this company put in to you, confidentially for the present, a statement of costs, including profit. The other statement was not printed in the record, but it was put in.

The CHAIRMAN: That quite confirms what the Chairman has said. If the Committee desire this company to put in a similar statement will someone make a motion to that effect?

Mr. ROSS: I move that the company put in a statement showing what price they are asking for their coal.

Mr. COWAN: I suggest that you write out your motion.

Mr. DOUGLAS: Perhaps the better way to get at that would be to ask the witness first who keeps the costs, and we might have that witness here with the documents. Would not that be the proper way?

Mr. KEEFER: This gentleman naturally is not familiar with these figures. Some of the mine operators or the accountant can furnish the information desired.

WITNESS: I suggest that you furnish me with a copy of the resolution, and I will see that the Committee is furnished with the information asked for.

By Mr. Keefer:

Q. I take it that you have not the output to supply any market beyond Montreal?—A. That is a big problem, depending entirely on what we may be able to do with our costs.

Q. Do you know how much the Montreal market requires?—A. It does not need any more than it did before the war, because there have been many plants electrified there.

Q. What amount would that be?—A. I cannot tell you except in a general way. Many of our pre-war customers do not now need our coal.

Q. What we in Ontario are vitally interested in is where we are to get our coal. You used to be at Duluth?—A. Yes.

Q. What is the freight rate on your coal to Montreal, normally?—A. We own our vessels, and that makes it a little difficult to say. There is a basis of cost, and a basis of cost carrying the interest.

Q. Supposing you were going to charge it, what would be the ordinary charge?—A. At the present time we could get boats at 8/6; we do not deal in boats by the ton.

Q. Give it to us on the per ton.—A. Per ton of coal?

Q. Yes, net tons.—A. Our company would charter a vessel and pay so much a month, which would cover certain charges, and in addition to furnishing the fuel would furnish port and various other little charges, and based upon the present very low freight rates and the successful operation, the good dispatch of those boats, it would probably cost us about \$1.25 a ton to \$1.50 to carry that coal to Montreal.

Q. That is very remarkable, because the freight rates to-day are low, and vessels are tied up in all the ports of the world?—A. Yes.

Q. And when they were not tied up before the war the freight rate to Montreal was only 90 cents, and even as low as 80 cents from Nova Scotia.—A. Yes.

Q. Why do you now say the probable cost would be about \$1.25?—A. Because that 8/6 which it is based upon will only pay the operating expenses of that boat, and the wages of the sailors are three times what they used to be. I say \$1.25 to \$1.50 basing it on our operations.

Q. You are delivering the Canadian National Railway's coal f.o.b. dock at Sydney at what?—A. Seven dollars.

Q. And how much in Montreal?—A. Eight dollars and ten cents.

Q. So that the freight rate does not represent more than a difference of \$1.10?—A. That is on cars in Montreal.

[Mr. Roy M. Wolvin.]

Q. So that the freight rate is much less than \$1.10 on your own figures, including loading and unloading, handling on the docks and putting it on the cars. Your statement does not jibe.

Mr. COWAN: Perhaps the witness may have an explanation to offer.

WITNESS: That comes from going into a very difficult market to hold. We have to break into Montreal again after being out of there for several years.

By the Chairman:

Q. In a general way, Mr. Wolvin, have you considered the prospects of supplying your coal to consumers in Ontario, and if so, what is the probability?—A. It is an impossibility at the present time until costs are very much reduced. As our costs are reduced the costs in the States are going to be proportionately reduced, in my opinion, and if they get a 10 per cent reduction possibly we will get a 10 per cent reduction, but under present conditions of transportation it seems impossible to hope that we could get into the real Ontario market.

Q. You could not do it with the present depth of the canal?—A. No.

Q. A 14 ft. 6 ins. load would not permit you to do it profitably?—A. Not unless there was some assistance rendered to get that coal in there with a view to procuring a production of coal in this country which would be available if the United States shut off our supply.

Q. Have you given consideration to that?—A. No, I have not, because I thought it was almost hopeless. We would like to double our capacity if we had some help in getting into the Ontario market. The only way we could do that would be by the Canadian National railways working with us and giving us special rates.

By Mr. Keefer:

Q. Is it not possible to increase the size of the vessel and her draught if we have a larger canal?—A. It would open up our market and open up the market to the Americans, and provide an easier means of access.

Q. Is that what you dread?—A. No, in the first place it will be twenty-five years now before we have the canal.

Q. Never mind the length of time.—A. What may happen in the meantime?

Q. From Cleveland ports you take coal to the head of the lakes for never higher than 50 cents a ton in vessels carrying 8,000 to 10,000 tons?—A. That was the last season rate, and ordinarily that would be a very good contract rate for the season, which means practically 95 per cent of the coal.

Q. And the rate used to be as low as 30 cents?—A. Yes.

Q. And they get return cargoes of wheat?—A. Yes, return cargoes of wheat and ore.

Q. If you had the ability to load your vessels at Cape Breton and come through the canal the same as a boat can pass through the Sault canal and carry a return cargo of wheat?—A. To Montreal?

Q. No, to Nova Scotia ports? Why should not wheat go right down?—A. There is nothing to stop it from going to Sydney ports.

Q. Nothing, except a needed elevator?—A. There are many difficulties in the operation of every business.

Q. Yes.—A. And a man shipping large quantities of wheat to Sydney, if we had an elevator there, or to Halifax, would have to be a pretty big operator and would have to have pretty continuous traffic in grain, or he would be doing it at charges you know nothing about.

Q. Big cargoes are taken to Buffalo?—A. Oh, yes.

Q. And then they are taken down to the seaboard?—A. Yes.

Q. If a cargo was taken down to the seaboard direct in a big ship, would it not be advantageous to us?—A. Yes.

[Mr. Roy M. Wolvin.]

Q. And then the tramp steamers would take it from there to all parts of the world?—A. My experience would tell me that you would load your grain not only from Port Arthur and Fort William to Montreal but from Port Arthur and Fort William to Europe or wherever it is going. If the grain went to Montreal, the steamer, in order to go to Nova Scotia and get coal, would have an extra trip of eight or nine days from Montreal out and back as far as Montreal before she started up.

By Mr. Douglas:

Q. But if the grain was taken to Sydney there would be no such loss of time?

—A. It is theoretically all right, but it is not practical.

By Mr. Keefer:

Q. Why could not that boat carry it on to Sydney?—A. Why does she not carry it to Quebec to-day?

Q. Because all the facilities are in Montreal. It is only a question of facilities?—A. Yes, and the larger the port gets the greater will the need for facilities become.

Q. I suppose Nova Scotia would like to grow?—A. We will carry grain down to Louisburg and Sydney and take coal back. It would make us that much more competitive.

Q. You get no return cargo to-day from Montreal?—A. No.

Q. You have to charge the price of the coal both ways?—A. Yes.

By the Chairman:

Q. Ontario is using 13,000,000 tons of bituminous coal each year, and it is probable that the consumption may increase. They have had great difficulty in securing this in recent years. What can the Dominion Coal Company do to relieve that situation? I know it is a general question?—A. They could not do it without preferential rates on the railroad that I do not believe would be obtainable. They would have to have some help for a number of years in the matter of selling coal in Ontario. If we had a subsidy for a term of years it would, I think, permit this company to go ahead with fresh development, knowing they had an outlet for the coal. It would mean we would have that increased coal production in Canada and conditions might develop which would enable us to hold our market.

Q. Or if the conditions were such that the production of coal in your own mines was greatly increased by constant operation, thus reducing the cost per ton?—A. Yes.

Q. Is there not a possibility of that?—A. Yes, if we get up to a 10,000,000-ton production we will probably get a reduction in the price of coal, and that is one of the things which is aimed at by the British Empire Steel Corporation. It is their desire, first, to get the different coal companies together in order to facilitate mining from one to the other's present stopes, and also to get more money and reduce the overhead and increase the efficiency in shipping, and to use everything to the best advantage, and through the big companies possibly finance the situation.

Q. The only way in which you can find a market for 10,000,000 tons of coal is to extend your markets, I presume?—A. Yes, unless we should be able to go to Europe.

Q. And that would also be an extension?—A. Yes.

By Mr. Keefer:

Q. Do not you think it would be better to try to supply some coal to Ontario?—A. I would much prefer to do so, but supposing you could get \$7 f.o.b. ocean vessel to Europe and could not get \$6 f.o.b. ocean vessel for Ontario, what would you do?

Q. It depends on how much profit you are getting out of the seven dollars. We must have our local demands satisfied or else prevent the coal from going out of the country. We cannot have our industries shut down for the sake of the profit of one company?—A. (No. answer.)

[Mr. Roy M. Wolvin.]

By Mr. Cowan:

Q. Quebec is undoubtedly a natural market for the Nova Scotia mines?—A. Yes.

Q. What are you doing in the way of policy to regain the market which you have lost in Quebec? Are you following out any particular policy or plan?—A. We have lost our market as I say, and it is difficult to go back. It is a charge that you really cannot see. It works into our business. There are people in Montreal who used to be our customers, good Canadians, who do not want our coal to-day.

Q. Do they give any reason for it?—A. There are other people who have taken care of them for four or five years when coal was hard to get. They may have paid \$14 or \$15 a ton for it, but somebody supplied them. Some of them will pay or some of them will remember a friend and will pay a little more. Take this American coal,—we are after every order in Montreal; our salesmen are on the street every time when there is any coal to be sold, and my opinion is that it may take two or three years to get some of the people to give up American coal and it is just through the service they have had in those trying times.

Q. As far as the quality is concerned, you have no difficulty in that regard?—A. I consider the quality of our coal better though lots of people argue that point when you are selling them.

Q. During your evidence you said you own 2,000 houses at your mines. The other day a statement was made that the conditions down there were very unsanitary and as a consequence there was a good deal of unrest. What truth is there in that statement?—A. I am hardly an authority but I will tell you the result of my investigations. I am satisfied that there are mining camps in which better conditions exist. There are other camps a great deal worse, but I think our Nova Scotia mining camps are fair and they are better than the average for coal-mining.

Q. The Alberta man told us that in Alberta where they did not provide housing for their men, that they had much less trouble than where they did provide housing. Can it be due to the fact that you have gone into this work that unrest might be caused?—A. You mean in building the houses?

Q. Yes?—A. I might say that the upkeep of our houses last year was \$226,000 more than the rent we got out of them.

Q. Do you rent this property, or do the men own them?—A. We own most of the houses the people are in, and the rent is nominal, about \$6 a month and we spent much more for upkeep than we received in rent.

Q. And they get that in addition to their wages?—A. And they get that in addition to their wages. I might make the statement that in my opinion that the miners of Nova Scotia receive better wages than anywhere in the world. The general conditions on that account are better.

By Mr. Douglas (Cape Breton):

Q. That is not what the Royal Commission found?—A. I am sorry about what the Royal Commission found, but I think in our negotiations with the men you will find that the statement I make is correct.

Q. Still the Royal Commission has taken evidence?—A. I think we satisfied the readers to this extent, that our miners in Nova Scotia were better paid, that during the war they had greater increases in wages at the time of our negotiations. They were better paid than other miners, with the exception of the Alberta fields in which wages had gone up very considerably, and I could not discuss it at the moment.

Q. That being the fact, how do you account for the fact that the Royal Commission that sat to investigate housing, rates of pay, etc., gave an increase of \$1 a day and a few months ago, that is to say June, twenty odd cents?—A. I did not read that report, and I do not support its findings, but in the light of present-day conditions, it was what they were investigating for, and that report will speak for itself.

By Mr. Ross:

Q. You have read Mr. Caye's evidence, have you not?—A. No, I have not.

Q. Mr. Caye said in his evidence that the Grand Trunk was producing in the Ohio fields coal at \$2.30 and they considered that a fair profit and in one part of your evidence you made the statement you considered yourself pretty well informed in regard to work at the American mines. There is a considerable disparity between \$2.30 a ton and \$7.53 in production costs. I thought from what you said before that you could probably explain to the Committee why that cleavage exists, why that spread exists. Mr. Caye must have been telling the truth, and we presume you are telling the truth. Can you give us any explanation about it?—A. Mr. Caye must be and you presume I am?

Q. I am not trying to throw stones, I just want the information?—A. I would suggest the Committee get that evidence, and you will have before you people who can give you these conditions. I do not think anyone would want to tell about conditions in these mines except some of the practical miners who know.

By Mr. McKenzie:

Q. I asked him if he was a practical miner, whether he knew anything about their mining system. He said no. He wanted to compare the Cape Breton conditions with those over there?—A. I think you ought to have somebody who would be able to furnish that comparison.

Mr. KEEFER: That is the whole crux of the situation.

By Mr. Cowan:

Q. Why is it that it costs so much more to produce in Nova Scotia than at the other points?—A. If you want a general statement of what my opinion is from what other people have told me, I can give you it now, but I cannot tell you from experience.

By Mr. Ross:

Q. You made a statement that you were informed in the beginning of your evidence. Are the wages higher over there?—A. The wages in the American mines are on a daily rate. They are a little higher, but our men on the whole make more money on account of steady employment.

Q. On account of steady employment?—A. Yes. All I know is their mining conditions are absolutely different. They are not the same kind of mines.

Q. Where does the difference exist?—A. I could not say offhand, and our non-producers are two-thirds of our total, possibly, who handle the coal and get it out. Our conditions I have been told, are very similar to the anthracite states. That is where the comparison should be made and not in bituminous mines. I think you can get all that information from someone else.

By Mr. Cowan:

Q. You have a very substantial foreign trade. Do you come in competition with any American coal in your foreign field?—A. We sold some foreign coal last year abroad. Coal that we sold in Canada at \$6 a ton last year, we were offered up to \$28 a ton if we sacrificed \$28,000,000 in living up to the request of the Government to take care of Canadian needs.

Q. You said you expected to develop a large trade with the West Indies. How do you expect to get any of that trade in competition with American coal?—A. We could almost be subsidized by Canadian control to get West Indies trade. If we had plants of our own down there we could buy American coal and take it out there in the summer time and then keep our Nova Scotia fields running in the winter time and keep our men employed, because the field for our coal in winter is very limited.

[Mr. Roy M. Wolvin.]

By Mr. Keefer:

Q. I did not think the statement was correct, but I heard it down in the West Indies, that Nova Scotia coal disintegrated when it gets down there. I hope it is not so. Do you know anything about it?—A. That is a question of what coal they compare it with. We have coal in Nova Scotia that disintegrates.

The CHAIRMAN: Does that complete the examination of the witness?

By Mr. Keefer:

Q. Your suggestion was taking coal down to the West Indies?—A. We are a six months proposition up here. The United States mines get the year's production even disregarding the number of days they work. We are tied up tight. We are bottled up for the winter.

By Mr. Douglas (Cape Breton):

Q. I do not like that statement that the Dominion Coal Co. is a six months proposition. It has never been such for the last ten or fifteen years until this year. There was steady employment every winter up to this winter, was there not?—A. I do not believe I am qualified to answer that. I am connected with this company a little over one year. I prefer not to answer that. You can make a note of it and get it from some other people. There must have been dull periods.

Q. I suppose we can get a statement of that, the number of idle days in comparison with other years which will show it is not a six months' proposition.—A. The Dominion has done awfully well this winter under the conditions.

Q. Any more questions to ask the witness, it is almost one o'clock.

By Mr. Douglas:

Q. Will you permit me one question, on account of the matter being important, I was suggesting to Mr. Wolvin if he could see any feasible plan whereby he might order the mines to operate now and have full work down at the collieries in Nova Scotia, and the difficulty he professed was the difficulty of finance, that they had 170,000 tons of coal banked in Cape Breton and it was difficult to bank any more on account of finance. I was asking him if he could find any solution whereby the mines could be worked immediately now and an order be issued to this effect.—A. I do not say they won't work on that account. I say that is my greatest difficulty.

By Mr. Cowan:

Q. The solution of the present problem is the contract with the Canadian National Railway, is that it?—A. Any contract we can get and we are lying awake nights trying to get them.

Q. It looks like too long a period conducting these negotiations with conditions as they are.—A. At the present time, to my knowledge I think that matters should be hastened as much as possible. I think the Canadian National should accept our offer at once. That is my opinion.

Q. As I understand the witness, it is on account of the difficulty of finance?—

A. I do not say we will not mine coal on that account, but I am frank to say that we are running the steel plant and piling steel that is not being sold. If we sell the Government coal it will be 90 days before we can get any return on the coal.

Q. They are slow to pay, I understand?—A. I do not know anything about that. But there is that danger. The inventories are tremendous. We had them written down and all that.

Q. I have here a statement dated March 22, 1921 and it is certified by Merrick, Mitchell and Co. Did you give us the statement of the assets of this company—A. That is the date of the certification of the statement. The statement is December 31, 1919. Our audited statement up to December 31 last year has not been completed.

[Mr. Roy M. Wolvin.]

The conditions in the country have changed tremendously. When you tie up so much money, I am afraid we will have to go and ask somebody to loan us money for our pay-roll. We have all the ore and all the plates for these contracts, just lying there since this financial statement has been made for these liquid assets, in cash, in coal, loans that the company has in Canada and the United States, Government bonds, in notes and accounts receivable a total of forty-five to fifty million dollars. I would prefer not to discuss the financial condition of our company here.

Q. It is pertinent to the question. The point that Mr. Wolvin made was that on account of the financial circumstances they were unable now to mine more coal and give steady employment.—A. I am making a statement here, presumably true, that that is the situation, and I wish you to take my word for it, I wish it was not.

The CHAIRMAN: We must adjourn at one.

By Mr. Keefer:

Q. This 53 cents duty we have to pay in Ontario on coal, does it in any way cut any ice on your coal? You cannot supply the Ontario market. They cannot compete with Winnipeg or in the Maritime Provinces. Why continue the duty?

Mr. McKENZIE: That is only about 9 per cent of the tariff.

The CHAIRMAN: Before the Committee adjourns I have a statement to read. The idea is when we get this statement if we are not satisfied with it we can call any official of the company we like to give us any information:—

“Mr. Ross moved, seconded by Mr. Cowan:—

“That coal operators called as witnesses by this Committee be obliged to furnish the Committee with detailed monthly statements from 1912 to date of the cost of production of coal per ton showing therein all items separately entering into said cost, said statement to be certified by their auditors.”

Mr. DOUGLAS (Cape Breton): In reference to Mr. Wolvin, there are some more questions, I understand. Do you propose to meet to-morrow?

The CHAIRMAN: Yes.

Mr. DOUGLAS (Cape Breton): Mr. Wolvin's evidence is not complete, I understand.

Mr. McKENZIE: The witness is discharged. Mr. Wolvin asked for permission to appear before the Committee to-day on the understanding that this was the last day on which he could appear, that he was leaving to-morrow.

Mr. WOLVIN: I made a lot of engagements and things which would make it impossible for me to come again, and I said this was the only day I could come. I will be here during the afternoon, but I would like to be excused for anything else. I think anything else you need you will be able to get from others.

The CHAIRMAN: I think—if I might express an opinion,—I think the Committee must endeavour to abbreviate the examinations somewhat and adhere more strongly to the evidence the witness is called to give. I think in that way we will make more progress and get better results.

Mr. DOUGLAS (Cape Breton): Mr. Keefer absorbed all the time. Dr. Chisholm did not ask a single question. He did not have an opportunity, neither did Mr. McKenzie.

Mr. CHISHOLM: I think the intention is that every member of the Committee gets the time he requires. That is what the Committee is here for.

The CHAIRMAN: All that I am asking is that the members of the Committee who are asking questions confine themselves to such questions as the witness who is called is supposed to answer.

The Committee adjourned until 2 o'clock p.m.

[Mr. Roy M. Wolvin.]

The Committee resumed at 2 p.m.

The CHAIRMAN: Will the Committee come to order. Mr. Douglas, before we start, a suggestion was made during the intermission which I think is a good one and it is that any member of this Committee examining a witness shall stand. When he sits down he is supposed to be giving way to another member of the Committee. It will avoid this confusion of questions.

By Mr. Douglas (Cape Breton):

Q. Now that we have had lunch I wonder if you would not be prepared to make some statement in regard to the full operation of the mines at the earliest possible moment in Cape Breton.—A. I am so anxious to see the mines operating to their full capacity that I probably would go further than the truth in telling you when we expect to do it. It means practically as much to us as it does to the men. I anticipate that this week's operations will be much more than the last few weeks. I would not be surprised if it was a continuous week, and the intention of the company is to operate all the mines to their full capacity just as quick as there is an outlet for the coal, and the company is able to sell it, or finance it if they do not sell it.

Q. So that I think it would be a safe deduction from your statement, Mr. Wolvin, to say that we could fairly expect steady times from now on in the coal fields.—A. I will say that you will find a much improved situation. The condition might arise where we would have to close down our high priced mines entirely if we could not get coal on a competitive basis for the entire output.

Q. The coal of Nova Scotia, Mr. Wolvin, is owned by the Crown?—A. Our companies have long time leases taken many years ago which we have at this time, and upon which we are paying royalties to the Nova Scotia Government and these are included in our costs, and are a large part of the revenues of the province of Nova Scotia.

Q. In a reasonable sense you would say it is a public utility?—A. I do not think I am qualified to answer that question.

Q. Would not the fact that the leases are owned by the Crown make it a public utility?—A. I cannot answer that question. I am not qualified to answer that.

Q. In connection with the operation of the mines, you are not, as a matter of fact, treating it as a public utility?—A. I do not know how I would treat it if I were treating it as a public utility. I fear the question is not clear in my mind—as to just what you mean; “whether I treat it as a public utility or not?” A public utility is the same—in the business I know most about it is a common carrier, and a public utility would be something under Government control, probably, as to prices and service, and the same service to all and all such things, and I would imagine that we are not treated as a public utility because we are in the export trade, and in the trade of the province of Nova Scotia, and the interprovincial trade of Canada, and I do not see how it could be considered a public utility, and I do not know what difference there would be in operations from what is going on now if it were treated as a public utility. It would be something that would require a good deal of thought before we could pass an opinion on that.

Q. All the rights the coal company have were obtained as a result of leases from the Crown, and the coal belongs to the Crown. Would that not in your opinion make it a public utility?—A. I do not think I am qualified to judge, and the leases would speak for themselves.

Q. In addition to common carriers—now, lighting systems are considered public utilities?—A. I am not qualified to answer any such question as an expert.

Q. If you were treated as a public utility by Nova Scotia what difference do you think it would make?—A. I absolutely do not know.

[Mr. Roy M. Wolvin.]

Q. Your rates are not subject to any consideration by any board—the rates charged for coal? That is a thing fixed entirely by the company itself?—A. That is a matter of trade.

Q. There is no special price given to Nova Scotian consumers of coal over the consumers of any other province, is there?—A. That is something I do not think I should necessarily answer here. I prefer not to answer. That is a matter of individual trade, fluctuating prices, changing from month to month, but coal is not sold to Montreal consumers in the province of Nova Scotia. They might at sometimes get it cheaper than Nova Scotia, and at other times Nova Scotia might get it cheaper than Quebec. I do not know. I cannot answer that. It is a matter of competition, in order to get the largest production at the lowest cost.

Q. From a consumer's standpoint as well as the standpoint of the miners, could not the mines operate at the present time if a reasonable market were available?—A. From the consumer's standpoint?

Q. Yes.—A. There is not a consumer unless there is a market available; at least, if there is and he does not buy his coal that seems to me to destroy my ability to answer that question. The consumer makes the market; they are one and the same thing.

Q. If the mines were operating steadily now from the consumer's standpoint, the cost of production would be less?—A. Yes, if we had double the production we would have a lower cost of coal.

Q. So that the result of the operation of the mine unsteadily, as now, is increasing the cost to the consumer?—A. That may be the case, but the consumer ordinarily pays a competitive price, or something near. Therefore it is probably not affecting the price. But we were discussing the conditions. That is a momentary condition. You are discussing this with the idea of getting the mines to work. You are not discussing this as to the future fuel supply of Canada at all. You are looking at it from the April condition, which is not a natural condition.

Q. I will come to the future supply.—A. Yes, what is your question?

Q. —in a minute.—A. All right.

Q. Well, generally speaking, the less coal that is produced and the more irregular the time, the greater the cost to the consumer?—A. Yes.

Q. And the reverse is also true?—A. At the same time if we were to close down the mines entirely so we could have a full production when we could ship the coal, it would cause a great deal of distress in the district. If we had closed the mines in the winter time so we could run full time now, it would have caused a great deal of hardship.

Q. Is there a uniform system of accounting in connection with the collieries of the Dominion Coal Company?—A. Undoubtedly there must be.

Q. Is it uniform with the system of the Nova Scotia Steel Company?—A. I do not know anything about the system of the Nova Scotia Steel and Coal Company.

Q. What would you say as to a Government policy requiring a uniform system of accounts to be kept by all coal companies in the country?—A. Well, my personal opinion would be that we have an awful lot of Government in our present business as it is, and the quicker we are given an opportunity to free ourselves from all this the quicker we will accomplish more. I think we are better off without too much Government interference in private business.

Q. Take the United States, for example. Do you know what their practice is in that respect?—A. I do not.

Q. In regard to the merger, Mr. Wolvin. The intention when it was formed first was to get a great deal of additional capital?—A. The merger was only formed once.

Q. When it was first spoken of?—A. I may have had some interest in the possibilities of the merger as originally discussed, but I would not be able to qualify as one to analyze conditions or the situation at that time, but it is quite evident the

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desire of those interested was to obtain a large amount of capital for the further development of this industry, and particularly the steam coal industry of Nova Scotia.

Q. But no additional capital appeared when the merger eventually went through?—A. The merger when eventually completed was without the furnishing of additional capital.

Q. Where was the merger charter granted?—A. The merger charter was granted in the province of Nova Scotia. I would prefer you would call it the British Empire Steel Corporation, as I do not know it as a merger.

Q. What is the production of coal of the British Empire Steel Companies?—A. What is the production?

Q. Yes, in comparison with the total production of coal in Nova Scotia?—A. I do not know.

Q. Can you give us a general statement on that?—A. I am unable to make a statement on that; I do not know.

Mr. KEEFER: It is very important to get some idea of the total amount you control.

The WITNESS: Offhand I would say probably—if the mines were running full, possibly 50 to 60 per cent; something like that. I do not know. It is just a guess, so it would be better if you did not put it in the record.

By the Chairman:

Q. Can you give us your tonnages?—A. I am unable to give the tonnage which the associated companies are really able to produce. Their ability to produce is increasing every month. They are all undertaking to develop their mines, putting them in better shape, putting in better power, and better tools, and better equipment of every kind, and undoubtedly will be able to increase their production, but what their relative full capacity is at the present time I do not know. There are a great many mines in Nova Scotia at the present time outside of the Dominion Coal Company, and the Nova Scotia Steel and Coal Company.

By Mr. Douglas (Cape Breton):

Q. Would it surprise you that the production was 90 per cent?—A. It would very, very much surprise me. I would doubt it very much unless it was very well authenticated.

By Mr. Keefer:

Q. Here (referring to book) is the production for 1920, the province's report, Department of Public Works and Mines?—A. What percentage does it give there?

Q. You can take it off there. The Dominion Coal is over three million out of five million.—A. It is a question of percentage.

Q. You can pick out your mines from there and get, roughly, the percentage?—A. Nova Scotia and Dominion have 3,851,000 out of 5,687,000, a little under 70 per cent, apparently, from that, for the Dominion Coal Company and the Nova Scotia Steel & Coal Company.

By Mr. Chisholm:

Q. Is the Cumberland included there?—A. That will add 413,000. That would make it about 75 per cent.

By Mr. Douglas (Cape Breton):

Q. Does that include the Acadia?—A. No.

Q. You might take the Acadia into consideration?—A. I would not be able to answer you as to whether we own the Acadia or not.

[Mr. Roy M. Wolvin.]

By the Chairman:

Q. Your estimate is taken from the figures—A. The figures I am using are those which the Committee has presented to me in the annual report of mines for the province of Nova Scotia for 1920 at page 96.

By Mr. Cowan:

Q. It strikes me that you must have a pretty big company if you do not know what mines you own.—A. We have an interest in the Acadia, but I do not know that we own it. I regret to state that I cannot tell you what portion of that we do own.

By Mr. Keefer:

Q. Have you a controlling interest?—A. I do not know, but I do not think so. We may have their bonds and some of their stock, or something of that kind.

By Mr. Douglas (Cape Breton):

Q. So, as president of the British Empire Steel Corporation, Mr. Wolvin, you are not in a position to say whether you control the Acadia Coal Company, Limited, or not?—A. No, I am not. If so, it must be in some way through the Nova Scotia Steel & Coal Company, some interest they have in the company.

Q. Would you be able to give us authentic information on that point?—A. I could find out. I would not want to give any information unless I knew it were authentic. I would not want to answer unless I did know.

Q. Mr. Wolvin, have you any statement in regard to the number of idle days in the Dominion Coal Company during the present year?—A. During our fiscal year ended March 31, or when?

Q. The present calendar year?—A. You are taking the only time we have had any idle days—January, February and March. I will state that you can take any year you want to take, any individual year, fiscal or calendar, and you will find there are less idle days than any place else in the world. That is a general statement, but I know there were fewer idle days than in the United States.

Q. We do not want the record of anywhere else; we want the idle days in Cape Breton?—A. I have no record of the idle days—the days the mines have been idle in Cape Breton recently, but we have worked every day that we could find orders for the coal or the money to bank the coal for which we had no present orders.

Q. (Handing witness papers). You might look at that statement of the idle time for the month of March of the Dominion Coal Company.—A. Who prepared this?

Q. The statement speaks for itself?—A. Oh yes, by Mr. McLaughlin. This is something I have not had the pleasure of looking over before. Most of these statements I read in the newspapers. I would not know whether that was fifty per cent right or 150 per cent right.

Q. You have no information?—A. No information. I know our production of coal has been down approximately to one-third of our capacity. I do not know what days the mines have run, but I will state that two or three weeks ago I had the pleasure of talking with Mr. McLaughlin, who is the secretary of the United Mine Workers' of America, District 26,—as is signed there—and with him was Mr. Baxter, the president. We discussed this matter very fully in an effort to arrive at an understanding which would in any way at all permit us to produce coal cheaper in order to get some orders. I spoke very fully to Mr. McLaughlin and Mr. Baxter and we discussed every means to better the situation, and it appeared that if we should close down our high priced mines we ought to get coal at about 60 cents a ton cheaper, but that would necessitate the closing down of the high priced mines entirely. They said that would cause too much distress in the district, and to the people there, and we finally decided that the best thing to do was to continue as we have been doing and run the mines as many days a week as we could and give everybody as much work

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as we could. We parted with the understanding that they were to see if they could make any suggestions that would save us the 60 cents a ton and produce the coal from all the mines, instead of the few where I knew we could get it and save the 60 cents.

Q. Will you prepare a statement for the Committee in regard to the idle time?—A. Yes.

Q. And I suppose the same condition exists at the steel plant? Will you give us a statement of that too?—A. I shall be very glad to.

Q. I suppose you have made an estimate for the present year in regard to the matter of production and sales and distribution of the coal of the merged companies?—A. We have had a general discussion and rough figures, and where we expect to find an outlet for coal, I have no statement.

By Mr. Cowan:

Q. You stated at the beginning that unless you were able to get onto a competitive basis you would have to close out a number of your high-priced mines. Now, what in your estimation has to be done to get the production there down to a competitive basis? Is it a question of wages, or what is it?—A. Well, it is a combination of all the costs. We are in hopes of reducing costs gradually. We have no right to hope for a reduction in labour costs. We have an agreement which we will have to live up to.

Q. Yes, that is right. But taking the working men down there who are idle, they are undoubtedly losing a great deal of money. Would it not be better for them to accept a lower wage and have steady work than have things continue as they are?—A. There is no question about it, to my mind, that if the miners of Nova Scotia could size up the situation in this world and have full knowledge of it, and know what is the right move for them to make, they would send people to us and arrange a new wage scale before it is too late to hold the markets, and have steady work instead of beating themselves down if our prices keep too high, and then, having lost all their work, we possibly have lost all the markets.

Q. Have you made any suggestion of that kind to them?—A. I do not think I should make suggestions of that kind to them. They have not lived up to their agreements with the Dominion Coal Company. I felt that they violated their agreements in making us enter into new agreements but we have an agreement entered into in good faith, with a great deal of pressure brought to bear upon us by all the Maritime Provinces, and our company is one that lives up to its agreements, and for me to make such a suggestion would be (as Mr. Baxter and Mr. McLaughlin could fairly see) going farther than I had a right to do. It is my personal opinion, however, that it would be better for the miners to get continuous work.

Q. You are evidently selling your coal at different prices at different points in order to meet the competition?—A. Yes.

Q. Have you reduced the price of your coal in the province of Quebec, which I would consider a natural market, in order to meet the competition there?—A. No, because we have not been there for years. This is our first quotation in Quebec since the war. We have gone into Quebec with a price that we think we should get to afford us some profit.

Q. What price did you sell your coal for to the Canadian National Railways in 1918,—do you remember?—A. No, I do not remember,—1918? Four dollars, I think. Perhaps I had better not say.

By Mr. Douglas:

Q. I think you gave \$4.35—A. Yes, which was 74 cents in error.

By Mr. Cowan:

Q. It is substantially higher since the British Empire Steel Corporation came into control? Why is it higher?—A. You are wrong in that statement. There has

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not been any advance in the price of coal since the British Empire Steel Corporation came into control.

Q. Do you make that statement absolutely?—A. I do, absolutely.

By Mr. Douglas:

Q. Well, there has been an advance to the railway, has there not?—A. There has not been an advance at all since the British Empire Steel Corporation came in control. There has not been an advanced price anywhere. If any change has been made in prices, it has been a reduction.

Q. That would be since the seventh last?—A. Yes.

Q. That is the time you dated from?—A. Yes.

Mr. KEEFER: How long ago?

Mr. DOUGLAS: The 7th of this month, when the merger was completed.

WITNESS: Just a few days ago. I have not done any business.

By Mr. Cowan:

Q. I understood you had done business as a company for a considerable time—A. No, none whatever as the British Empire Steel Corporation. That corporation has done no business of any kind with any consumer of any commodity, and since their incorporation the Dominion Coal Company has not advanced the price at any point, and if there has been any change anywhere it has been a reduction, and as far as the Nova Scotia Coal Company is concerned, I do not know what their quotation have been before or after.

Q. But I understand the price you offered to the Canadian National Railway just the other day, which I presume would be made by the new corporation, is a higher price than you ever charged before?—A. No,—I would like to be sure of that. I am quite certain that the date must have been before, before I went east to the meeting. The price has not been increased since, and I will state that the price offered to the Canadian National Railways is not any higher than the price they paid and have been paying to us, and if there is any advance at all it is only 5 cents a ton. Our price is a matter of negotiation. We have made them a tender on the business, and if there is any advance over the price in the first tender we made it does not exceed 5 cents per ton.

Q. And as a corporation you will not be held responsible for anything these different companies did in connection with it before the 7th of this month?—A. I suppose there are creditors who may hold us responsible, but the British Empire Steel Corporation has not, either before or since incorporation, had anything to do with the operation of those companies.

By Mr. Douglas:

Q. What was the value of the Nova Scotia Steel stock in the market at the time of the merger?—A. Well, do you mean what was it selling at?

Q. Yes, the market value?—A. The market reports would show that. I should say possibly 37 to 42 in American funds; I am not sure which it was.

Q. And the Dominion about the same, I suppose?—A. The Dominion would be about, in Canadian funds (the other happens to be trading in New York more than anywhere else) 44 or 45 approximately, I do not remember exactly.

Q. Your suggestion was that in view of the present situation and the coal outlook you thought the proper thing to do was to endeavour to arrange for a new wage scale?—A. Please repeat your question.

Q. In view of the outlook for sales of coal, you expressed the opinion that it would not be an unwise thing for the labour unions to negotiate with a view to having a revised wage scale with the company?—A. I certainly think it would be a very wise thing for them to act upon such a suggestion.

[Mr. Roy M. Wolvin.]

Q. In other words, you are suggesting that the companies should pay less wages under the circumstances?—A. I am suggesting that our company shall carry out any contract it has entered into, and we propose to carry out this one. I was asked for my personal opinion as to what was the wisest course for the men to pursue. I cannot give them advice, nor can my company. It is a personal matter, and possibly I should not have answered the question.

By Mr. Cowan:

Q. In other words, you think the initiative should come from the men?—A. It cannot come from us. If I owe you \$100 I might ask you to take \$50 in settlement, particularly if I owed it to you, but in a contract of this kind I think it would be beneath us to approach the men.

By Mr. Douglas:

Q. Do you think it is reasonable for the men to approach you when at the same time your company has issued a large amount of additional stock on which, ultimately, dividends will, it is hoped, be paid? Is not that the reverse policy of the one you advocate in the case of the miners?—A. If that was the condition I would agree with you, but the condition you picture does not exist.

Q. That is, that there has not been an additional amount of stock issued?—A. Not unless covered by fully earned surpluses, and there has been no water put in it.

Q. But there has been no additional capital put in?—A. We would have been very glad to put additional capital in if we could get it.

Q. But at the same time there has been no additional capital put in?—A. No, and no water.

Q. But is it not a fact that for every common share of the Nova Scotia Steel or the Dominion Coal or possibly the Dominion Steel Corporation, a similar share in par value is given to the holder of the share in the Nova Scotia Steel or Dominion Steel and a bonus as well?—A. I do not know whether you would call it a bonus or not. I knew shares were given in exchange. It might be termed a bonus. I do not know what the proper term would be, but I do not think that by these particular questions you will really arrive at anything you want for the purposes of this particular case, and I would like to rest my answers in connection with that matter with the statement that any increase in capital that is shown in the British Empire Steel Corporation is less than the accumulated earned surpluses in the constituent companies that have never been distributed to its shareholders, and leaving still undivided surpluses, and that there is no water and no additional stock to earn on, or no additional investment to earn on.

Q. No additional stock?—A. No additional investment. I will correct that statement.

Q. What additional stock is there?—A. That is merely a matter of figures. It will take some time to work it out.

Q. That is a very important statement, and has a very important bearing on the matter, for the reason, as I understand it (I do not think the public are very clear on the point) that for practically every two shares that existed before there are now three shares in existence? Would that not be a fairly correct general statement? I am not dealing with the question as to whether it is 40 or 45.—A. That would be such an erroneous statement that it should be corrected.

Q. Let us know what is correct.—A. I would think the figures would speak for themselves at any time. The accountant could give you that and tell you where the stock came from.

By Mr. Cowan:

Q. We are willing to receive that?—A. I would be very glad to get it from someone in authority who could analyze the statement and give you the information you desire.

[Mr. Roy M. Wolvin.]

By Mr. Douglas (Cape Breton):

Q. I am quoting from a statement of yours as president of this corporation under date Montreal, March 1, 1921, and I understand you to say it is not nearly correct?—A. I said your statement should be corrected.

Q. What does a holder now get for each \$100 share in the Dominion steel if he exchanges his stock for that in the British Empire Steel Corporation?—A. \$95 second preference and \$40 of common.

Q. In other words, he received in share par value pretty nearly a third more than he formerly held?—A. Yes.

Q. Is not that the statement I made?—A. I thought you said more than a third.

Q. The record will show I did not?—A. Then I will apologize for not understanding you if you said a third.

Q. That is the case of Dominion Steel. Practically the same remarks apply in regard to Nova Scotia Steel. Not quite, but practically, is that correct?—A. Reasonably correct.

Q. So that it will be generally safe to state that as far as securities are concerned, apart now from bonds and debentures, which remain as they were, as I understand it, there is now a third, roughly, more capital issued in the British Empire Steel Corporation than in the constituent companies?—A. No, sir.

Q. Wait a moment. Roughly a third, I say, with this existing fact that no additional capital has been brought into the company? Now, if that is not quite correct, will you make it correct?—A. I will make it correct to the extent of saying that most anyone of your accountants could analyze that statement and show you what were the capital issues of the three constituent companies before they were consolidated, and approximately, following your figures and trying to get a rough idea, the capital issues of the company would not be increased probably 25 per cent, and any such increase as may be found is less than the accumulated earned surpluses of the companies.

Q. Admitting that there is a surplus there equivalent to the amount of new issued stock, the fact remains that there is roughly a third more issued stock?—A. What difference does it make whether it is in surplus or in stock? You do not understand it.

Q. Oh, yes, I understand it, and I think my next question will indicate what I mean: there is a third, roughly, more issued stock. I presume that the hope of the corporation is that some day they are going to receive dividends on that additional stock?—A. I think they would be perfectly entitled to pay dividends on it at the present time the same as they would disburse their surplus and buy new stock.

Q. Without putting in any more capital?—A. Certainly not.

By Mr. Keefer:

Q. What was the stock selling for at the time?—A. In dollars and cents?

Q. The value of the surplus?—A. Mr. Keefer, the Dominion Steel Corporation has put into its own stock, and so has the Nova Scotia Steel Corporation, the money they never divided. They put in more than the stock was selling at. They left it in to develop the properties.

Q. You would have thought that would affect the value of the stock?—A. There is not a stock selling at its value that I know of.

By Mr. Douglas (Cape Breton):

Q. Can you supply us with a statement for the past eight years, beginning with say 1912, of the amount of coal supplied to the Dominion Iron and Steel Corporation by the Dominion Coal Company?—A. Yes, that would be very easy to provide.

Q. Together with—A. Just a moment. Do not you think you are trying to delve a little too deeply and a little too minutely into our affairs?

Q. I do not want to do that. As a matter of fact, I was going to ask you about the plate mill, and my question would plainly indicate—A. What your line of thought is?

[Mr. Roy M. Wolvin.]

Q. Yes. Perhaps we can jump to the plate mills?—A. All right. Such a statement could be prepared. I do not know that it would be of much benefit to the Committee, but there is no reason why you could not have it.

Q. In reference to the plate mills, please tell the Committee the situation. The Chairman may say this has not very much bearing on the question, but I think it has, inasmuch as the funds of the corporation have been expended in building the plate mill, and perhaps the complaint in regard to insufficient working capital and the extension of their steel properties might not have arisen otherwise?—A. That is a matter that is between the Government and our company. I feel a little reticent in saying anything about it.

The CHAIRMAN: Not being a lawyer, Mr. Douglas, perhaps I do not see the point as readily as a lawyer would. You refer only to the statement regarding the surplus of the Dominion Iron and Steel Corporation?

Mr. DOUGLAS: Perhaps I could get it by asking one or two questions.

By Mr. Douglas:

Q. The Dominion Iron and Steel Corporation has spent several million dollars building a plate mill under a contract with the Dominion Government?—A. Yes.

Q. And this contract has been abrogated?—A. We have been instructed to roll no more plates under it. I think that is the instruction. I suppose that would be abrogated.

The CHAIRMAN: Mr. Douglas, I think it would scarcely be proper for the Committee to go into any investigation of any contract for the manufacture and supply of steel plates. Can you not get the information you want without going into that?

Mr. DOUGLAS: There are always two sides to a question, and one of the figures that has crept into their operation is due to the fact that they should have the Government pay back to this company a very large amount of money for money they expended under the contract which has been cancelled.

Mr. KEEFER: Do you think this is the proper place to go into that? That is not the question we have to determine, but what is the source of the future fuel supply for Canada.

Mr. DOUGLAS: It has a bearing.

Mr. KEEFER: That is a matter between the Government and this company. What have we to do with it?

Mr. DOUGLAS: If the Government would reimburse this company to the extent of several millions of dollars those millions of dollars would be available for the opening of coal properties that this corporation, as I understand it, would in all probability utilize.

Mr. KEEFER: Supposing you got your answer yes or no, what bearing has it on our inquiry?

WITNESS: I think Mr. Douglas has in mind the great need of the company for money. We certainly do need it, because our money is tied up in the plate mill which could have been employed in other ways.

The CHAIRMAN: I think perhaps my opinion may be wrong from a legal point of view, but speaking from the practical point of view of a layman, I think it would be better to avoid questioning this witness along that line.

By Mr. Keefer:

Q. I wonder if Mr. Wolvin could give us any suggestions as to the statement made by the Minister of the Alberta Government respecting converting coal into coke. Perhaps this witness would not be the proper witness to call on that. A statement was made the other day by an expert from the West, that in his judgment these ovens might be used for making coke.—A. We have studied the conditions through the Maritime Provinces in relation to transportation facilities, in an effort to compete in this line. We have been unsuccessful in arranging sales of coke that would give us profit in this business.

[Mr. Roy M. Wolvin.]

By Mr. Cowan:

Q. Did I understand you to say you were figuring in your present costs to-day the loss you sustained during the period of Government control and so on?—A. I stated in a letter I think I read that this deferred development that was neglected during the war, which ran our production down from 5,000,000 to 3,000,000 tons a year was a charge that should have been included in the cost of coal during these years. In other words, we sacrificed the condition of our mines and we were not permitted by the Fuel Controller to make such collections; therefore, we had to go ahead and get those mines back into shape.

Q. That is to say you are spending the money in this deferred development?—A. We are spending some. We had very little opportunity to do that until along this winter. Last year we were still producing every ton of coal that we could. The railways needed it. Everyone needed it. We could not get enough coal for them.

By Mr. Keefer:

Q. Last year?—A. Yes, right straight through until November. We could not get coal enough to satisfy the people.

Q. The returns show in 1919 there were shipped from the Nova Scotia mines 64,000 tons and in 1920, 557,000 tons. Apparently you were not supplying the railroads and the local markets. You were supplying European markets?—A. We closed some contracts in the winter of 1920 to sell some coal for export in trying to provide an outlet for our coal and you will notice from that communication I had with Mr. Hanna, it was one of the reasons we had no unsold coal. We had sold him more than he had been accustomed to take from us. Our production did not increase as we hoped, and we had a very difficult time to take care of our business and if you will look up that 557,000 tons for export, you will not find that the Dominion Coal Company has the usual production as compared with what is produced in the province of Nova Scotia.

Q. I understand you had been offered \$55 a ton by the Government?—A. We have not.

Q. The Government yesterday closed a contract for 50,000 tons with the Algoma Steel Co. Did you try to get that at the same price?—A. I did not hear until last night that they had closed.

Q. Do you not negotiate at all with the Railway Company with regard to these matters?—A. We do, but those are other Government matters which we hardly thought we would like to bring in here.

Q. With your coal mines still operating?—A. It would cost us to-day to produce rails about \$62.50. We have offered to roll rails at less than cost. We have never been offered to roll rails at any price.

Q. That would figure coal at what price?—A. Around \$3.40 we will have to have to get \$62.50.

Q. At the price you were speaking of you would not lose anything at all at \$1.55.—A. At present, you mean, even at \$55 there is a profit?—A. \$55 there is no profit. We could not make a profit under those conditions. That would be as long winded as an investigation of the coal business to try to find out what took place in the steel plants. Also, when the Canadian National buy their coal from us they send a man who wants to talk cost basis.

Q. According to the governmental returns the figures are, from the Dominion Coal Company, 427,636 tons; from Nova Scotia, 58,082; the amount of tonnage shipped to Europe in 1919 was only 64,000 tons. You apparently had that foreign market.—A. I have felt it could not reach such proportions because we were unable to fill our contract. We were unable to fill all our contracts and as a consequence we lost those connections and other people took trade we developed.

The Committee adjourned until Friday, April 22, at 1.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

FRIDAY, April 22, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: The committee will please come to order.

We are going to ask Mr. Côté, the Provincial Secretary of Alberta, to make a further statement to the committee this morning, and after he is through we will hear from Mr. Dick, the sales agent of the Dominion Coal Co.

Hon. J. L. CÔTÉ, recalled.

The CHAIRMAN: Mr. Côté.

WITNESS: Gentlemen, before I start this morning I would like to refer to certain statements made by Mr. Cook, of the Mines Branch, who has appeared before this committee. I have a newspaper in my hand which contains this heading: "Many coal mines in Alberta being destroyed by ignorant foreigners." I do not know how many foreigners there are in charge of the mines in the West, but I do not think there are any, unless Scotchmen and Welshmen are to be regarded as such.

By Mr. Cowan:

Q. How about French Canadians?—A. They have not gone that far.

By Mr. McKenzie:

Q. I want to warn you that you are on very dangerous ground.—A. Thank you.

By the Chairman:

Q. You do not look upon Scotchmen in Alberta as foreigners?—A. No, sir. There are certificated men in charge of the mines, supervisors, overmen, and pit bosses and mine managers. These men have to pass examinations before the inspectors. There are about twelve mine inspectors who have to report on the safety conditions in the mines, and so forth.

By Mr. Blair:

Q. The Provincial Government of Alberta appoints these inspectors, I suppose?—A. Yes, and it is their duty to make inspections to see that proper precautions are taken with regard to the safety of life and property. They make periodical visits to the mines, usually every two months or so, and make a complete report of the condition of these mines. Judging from the evidence given by Mr. Cook, he has never been in the West. I believe he admitted that. A great deal of the capital invested in the mines of Alberta comes from different parts of the world, and there can be no doubt whatever that the mines have suffered a great deal on that account, as well as their financial condition. The investors who are living away from the scene of operations often send men from England or from the United States to take charge of their mines,

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and they are not acquainted with the local conditions, and are not always very well acquainted with mining, and therefore the financial situation of the companies is often seriously affected by that fact. I hope that it will correct itself in time to come.

I believe the statement you wish to hear this morning, is with reference to the problems we are confronted with, in the province of Alberta, and their solution, and also the possibility of extending our market as far as Ontario, where it should meet the Nova Scotian coal. I believe that the mines of Alberta suffer for the want of a proper system of distribution. Every ton of coal is shipped by cars, and very frequently trouble is experienced in having cars spotted, and, of course, if there is an insufficient supply of cars, the mines have to shut down and the miners are thrown out of work. The fall of the year is the time that the coal is required, and cars are also required for the transportation of the grain at that time, and consequently there is frequently difficulty in securing cars. When I was managing a mine there, we suffered a great deal from that condition, and during the war, of course, the car shortage was a great deal worse than at any other time. A statement was furnished by one of the mine directors that we worked only 16 days in one month, and that we could not afford to keep the mine open, although we were told we had to keep the mine open. Of course, if we had a storage depot in Winnipeg, and later on storage depots in other cities, it would render the car shortage more elastic. I believe that we should have a big storage plant on the same basis as they have in the United States on the Tidewater Pool, where all the coal is brought and tested to ascertain its value and quality and sold according to its value. We could have a testing plant, and grade the coal there as they are doing at the Tidewater Pool. There is no doubt if we had a storage depot at Winnipeg, and if that coal was graded it would help immensely, and should they need the coal in Ontario they could draw it from that storage depot, which could have say, 1,000,000 tons always in reserve.

By Mr. Cowan:

Q. In case of emergency?—A. Yes.

By Mr. Ross:

Q. Would it not deteriorate very much?—A. The bituminous coal would not deteriorate at all. I know I have seen that coal present no indications of deterioration after having been on the dump for three years. Of course, if you pile the coal fifteen to twenty feet high—it would be necessary to spread it properly.

By Mr. Blair:

Q. Have you gone into the cost of erecting a storage depot?—A. No, we have not gone into the details of that yet. Of course, the province of Alberta feel they cannot afford to undertake the establishment of such a depot. They think it would very properly be a Dominion Government undertaking. I have talked to a great many mine owners about it, and they seem to think it is a necessary thing, more so for steam coal.

By the Chairman:

Q. Does steam coal not deteriorate?—A. No, sir. I do not pose as an expert, but that is the opinion which has been expressed by a great many engineers,—that steam coal does not deteriorate. Of course, with that transportation we would have to have a summer rate, say, 20 per cent differentiation.

By Mr. Cowan:

Q. When would you start that?—A. From the spring until say, May, June, July and August.

Q. Would you consider it ought to be graduated, that is a larger amount for the first month?

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The CHAIRMAN: The witness refers to the freight rates.

Mr. COWAN: Oh, I see.

WITNESS: It would go in connection with that storage. It would relieve the congestion of the fall transportation, when the wheat is coming and the other freight. If we had a differentiation of 20 per cent during the summer no doubt it would be a great relief, and it would bring us nearer Ontario. Of course, this is the immediate problem. You are voting this year, I understand, some money for industrial research. It seems to me that if there is an investigation into the coal situation it should be conducted in the province of Alberta, where we are confronted with different problems.

By Mr. Cowan:

Q. That is, that Alberta should be included in our programme?—A. Yes. Mr. Stansfield, who is now our chief engineer, used to work in the testing plant here for the Dominion Government, and he saw that he could not carry on his investigation as he wished unless he was right in the field, and that is why we were successful in bringing him out to Alberta, where he is right on the field. You have already good testing plants, and other apparatus that we have not yet obtained, but we are this year purchasing about \$10,000 worth of laboratory material for coal analysis.

Q. You have just recently established a Research Bureau in the province of Alberta?—A. Yes.

Q. And they would be quite prepared to co-operate with the Dominion Government?—A. Oh, yes. These are the immediate problems, and they will, in my opinion, eventually be solved by water transportation, to which I referred the other day, and by the storage of the water in the mountains to furnish Saskatchewan. This water could carry the coal and also the wheat of Alberta, and while this water transportation cannot be accomplished immediately, I believe it will eventually be established.

Q. What I understand you to mean is that if you get that water transportation on the North and South Saskatchewan to Winnipeg, then you would be able to supply Ontario with coal and compete with the American coal in Ontario?—A. Pretty nearly. I feel if we could get a water rate of about $1\frac{1}{2}$ mills it would make only \$1.50 freight from Alberta to Winnipeg.

Q. As a matter of fact, with that system established, the rail transportation from Alberta to Ontario points would be no greater than the rail transportation from the fields in Pennsylvania to Ontario.—A. I do not think so. We would have then only four hundred miles of rail, and they could carry it in train lots from a large storage depot in Winnipeg. That will be the eventual solution of the problem.

Q. With regard to your investigation of that Saskatchewan water route, have you any data on which you can base that rate of $1\frac{1}{2}$ mills?—A. No, it is more as the result of an investigation of the Howe river.

Q. Where is that mentioned?—A. I do not think the rates it would be carried at are mentioned here. They don't mention the rate but there is a report that I might supply the committee. That was the result of investigation by engineers and by a commission of engineers for the United States Government and the Howe river, from what I can learn is a great deal the same as the Saskatchewan.

By the Chairman:

Q. According to the amount of traffic that would be available?—A. We have the traffic too, but it could grow. There is only one-tenth of the line occupied now. This water transportation could not be done in a year. That is a scheme probably that would take—well, they took five years to make the survey and it would probably take twenty years to evolve. In twenty years if you compare the past with the future you will notice that thirty or thirty-five years ago there was no traffic at all there and now we are keeping three railroads, but of course they are not supposed to have all the work that they could carry, but you could see it growing every year. If I remember

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right, for the same distance on the Howe river the rates were 1.14 mills on the Howe river and on the Volga and European rivers they don't go any higher than 1.25. Now this water route would partly or pretty nearly be paid for by the development of electricity and hydro electric, that would be necessary for the storage in the Rocky mountains.

Q. I presume you anticipate you will have a market for that electricity by the time the improvements are made.—A. For instance, they would have two big rapids on each side of Edmonton. Edmonton is now developing their electricity by coal. They would probably use it all.

By Mr. Blair:

Q. Would it be necessary to have locks there?—A. I think so. There is provision on the survey there.

Q. I mean between Edmonton and Battleford?—A. No, there are not many there. The drainage of the river and the boulders are estimated at \$4,800,000. Construction of locks, dams and canals is estimated at \$14,000,000. They ought to have a couple of thousand horse power in the mountains, in the storage in the mountains using the rapids.

By Mr. Ross:

Q. I want to get just a little more information with regard to the statement you made a moment ago referring to the proper distribution or uniform distribution of cars. Would you please explain that? You have three railways and you have two or three hundred mines out there. Just explain that in a few words.—A. I don't know that I can explain it any more than to say that some of the mines sometimes have a pull. They either have a pull with the despatcher or somebody and he can get the cars, and the poor beggar that is at the corner with a small mine goes begging.

Q. Your suggestion is to appoint some official who would have some control over the fair distribution of cars?—A. Yes and he should be a man who is acquainted with mining, who would know the production of these mines, and if the railways cannot furnish all the mines, they should at least furnish them proportionately to their outputs.

By Mr. Blair:

Q. On the same basis as the shipment of grain?—A. Yes.

By Mr. Cowan:

Q. It is easy to come to it.—A. Really, it is the same thing except that he has to be a mining man. The grain man is all right for the grain, but you have to have a coal man to be able to direct it.

By Mr. Blair:

Q. Mr. Coté, do you think there can be anything gained by organizing the distribution of cars with regard to the mines with the object in view of getting the coal out in train-lots instead of car-lots, that is, for the longer shipments to Saskatoon and Winnipeg, for instance?—A. The railway company I think are doing it for themselves.

By Mr. Cowan:

Q. It is the most profitable way for them to handle it?—A. Oh, yes; the mining operators or the buyers.

By Mr. Blair:

Q. There might be a slight reduction in freight?—A. Oh yes; there ought to be. To us it depends on the distribution of cars. Now, I know some companies that have

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got contracts with railways and they won't take more than 5 cars a day, and they don't want to stand for loading any more than five cars a day.

Q. If they would get together and arrange to have their shipments made up in train-load lots?—A. If the Railway Commission decided that they would handle train-lots from the different parties cheaper, there is no doubt about it but I don't think they will stand for it.

By Mr. Cowan:

Q. The operator does not gain anything at present?—A. If you have a small mine the yards are limited, and in their yards they can hold say ten cars only. Well, they have not got trainloads and they cannot wait for trainloads from that mine. It would have to be a pool between different mines, but I don't think the railway companies would stand for it.

Q. Why?—A. Because it is a pool between the different parties.

By Mr. Blair:

Q. It is not a shipment from one man?—A. What they mean by trainloads, your train is right in the yard and it goes right off. I think that is the best understanding of trainloads.

By Mr. Cowan:

Q. You spoke of a differential of 20 per cent in the railroads?—A. Yes.

Q. The householder is really the largest consumer of coal at the present time in Saskatchewan?—A. Yes.

Q. And the idea is to get the householder to lay in a supply of coal early in the summer?—A. Yes.

Q. To do that they must have some inducement, the municipalities as well?—A. Yes.

Q. Do you think it would be possible to have an arrangement made of 20 per cent with the railways, the operators also agreeing to give a certain proportion of their profits and the miners a reduction in their wages during those months in order to give that differential which would induce the purchase of coal in those months?—A. There is no doubt the miners would be willing to give a reduction in the summer. I don't, of course, know about wages. That is a thing that would be in the hands of the director.

Q. It would mean steadier employment to the miner?—A. Surely they would be willing to give a proportion along with the others. There is no doubt it would be in their interest to my mind, but the dealer and the mine owner would be willing to give their reduction I know. I don't know about the men.

Q. You have not any idea as to the amount. You have never tried to figure out the amount of the differential in order to induce people to put in a supply early that way?—A. We figure \$2 a ton.

Q. If you can give \$2 a ton I am satisfied that every householder in Saskatchewan will fill up their cellar in the early part of the season.

Q. The city of Regina says it would be better for them to do so at a figure less than \$1 and for the schools and hospitals it would be something more than \$1.—A. I was figuring if you have 50 cents for the operator, 50 cents for the dealer, and \$1 on the—

Q. If that can be accomplished you have solved the problem. I think there can be no trouble at all.—A. We are going to try to prevent American coal coming into Winnipeg if we can help it. As long as we are protected they cannot do any dumping on us.

By Mr. Ross:

Q. You sell coal in Winnipeg at \$11, don't you? That is about the lowest?—A. Yes.

Q. It costs you about \$5.50 at the mine, and about \$5.50 freight. If you would get that water route you would reduce it from six mills to a mill and a-half. Instead of being five and a-half it would be a quarter of that.—A. That would be about \$1.75. It would be \$1.50.

Q. So you would get it into Winnipeg for about \$7. So to get it to Ontario, then if you had your canal you would get it to Winnipeg for less than \$7. Then you have to get it from Winnipeg to the head of the lakes, and from the head of the lakes to Toronto and Sarnia. What is the difference from Winnipeg to the head of the lakes?—A. About 400 miles.

Q. What would be the freight rate per ton?—A. At $3\frac{1}{2}$ mills, trainloads, that would be about \$1.25.

By Mr. Cowan:

Q. The Canadian Northern said the other day $\frac{7}{10}$ of a cent per ton per mile?—A. There is a different classification for coal. We have a rate of about $\frac{4}{10}$ from Edmonton to the coast.

By Mr. Ross:

Q. You get \$8.50. At the head of the lakes you have to discharge into the vessel. How much would that cost?—A. About 25 or 30 cents.

Q. There is \$9.30. What is the freight rate from Port Arthur to Sarnia? That would be the nearest point.—A. I don't know.

Mr. COWAN: That was given the other day, you can easily figure it up.

Mr. ROSS: Say 60 cents. That would be \$9.75. You have to discharge and put it on trains. You might get it for \$11 or \$12 a ton if you got your canal. I don't think we could get our coal from Alberta. I wish we could.

By the Chairman:

Q. It would reduce the cost out there.—A. If you take the present cost of producing coal it will come down, there is no doubt about it. I know before the war we had contracts with the railways. There were contracts for \$2 per ton at the mine.

By Mr. Ross:

Q. Where you got \$5.50 or \$6, it was costing you that?—A. That would make a big difference. I know we have produced for \$2 or \$2.25.

By Mr. Cowan:

Q. It is evident to me from the evidence that has already been given that the production at pit mouth in the United States cannot be reduced very much from \$2.30 to \$3, whereas we may be able to reduce it considerably. That is what is going to benefit the Canadian and Alberta mines.—A. Of course we have to pay duty to bring in mining machinery.

Q. Is that very much of a disadvantage to you?—A. Except it increases the capitalization, that is all.

Q. I do not want to introduce politics into it. If that duty of 53 cents on bituminous coal was removed, would it in any way interfere with your efforts to retain the Manitoba market?—A. I could not tell you because I doubt if it would make very much difference, because there is no doubt that a great deal of the coal is coming in at the head of the lakes as slack. I know when we were in competition with the competition that we had I am satisfied it was slack. It was Youghigency slack, but I am sure it went in at 14 cents duty.

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Q. Really it is unfair competition you are up against?—A. We are supposed to get at least 53 cents and I am sure the coal against which we competed only paid 14 cents.

Q. It is really dumping?—A. Yes. I don't say there is much difference in the bituminous coal between the slack and the lump as to the value of it. That is a matter of policy I have nothing to do with.

The CHAIRMAN: Perhaps Mr. Côté can continue his statement now.

Mr. COWAN: All right, I am through.

WITNESS: I don't know that I have very much more unless you ask me some questions on things that I might have forgotten. There is storage, summer transportation, car distribution and waterways later on.

By Mr. McKenzie:

Q. Are you a railroad man yourself? Do you know anything about railroading?—A. I am a civil engineer. I am not conversant with rates very much.

Q. I mean the operating of a railway?—A. No, I don't pretend to be a railroad man in that sense.

Q. Is there any chance at all of utilizing the railways straight through for the transportation of your coal more than you are doing now to improve that situation?—A. Unless we get reduced rates. I think we were treated—last fall when the increase was given—I think the commission was fair as far as it went, compared with the others.

Q. I suppose your coal is now hauled in mixed cars?—A. Yes.

Q. Suppose you had a system of nothing but coal trains with coal cars and one or two trains making it altogether their business to carry coal and having a special kind of car for that purpose, don't you think they could carry your coal cheaper than they are doing now?—A. Oh, they should carry it cheaper.

By the Chairman:

Q. It depends largely on the loading and discharging?—A. We are doing the discharging and the loading. They have nothing to do with that. They take the cars at the mine ready to go and of course we unload it. Most of it is in box cars.

By Mr. Cowan:

Q. Is that more expensive than the ordinary dump cars?—A. The unloading is certainly more expensive. Our bituminous is very fibrous though and a great many prefer to transport it in box cars. They claim they lose a certain percentage by the wind.

Q. I don't doubt that at all.—A. Our bituminous gets very fine.

By Mr. McKenzie:

Q. They could cover their cars?—A. No doubt. As to the domestic there is no doubt it would be an improvement.

By Mr. Cowan:

Q. The domestic coal?—A. Yes.

Q. I am afraid there is rather some confusion as between the terms used in Alberta and the terms used in Nova Scotia regarding the different coals, bituminous and domestic. The bituminous is lignite?—A. That is steam coal.

Q. The domestic is lump coal?—A. Lump coal. It may be semi-bituminous.

The CHAIRMAN: Is the committee through with questioning Mr. Côté? I wish on behalf of the committee to express our very great pleasure in having Mr. Côté with us and also the other representatives from Alberta. We appreciate very much the interest the Alberta Government has taken in our investigation into the general fuel situation. We are very much encouraged by their assistance.

The witness withdrew.

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ALEXANDER DICK, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. General Sales Agent, Dominion Coal Company.

Q. How long have you occupied that position?—A. Since 1903.

Q. You are located where?—A. I am located since 1910 at Montreal.

Q. Have you prepared any statement, Mr. Dick, that you wish to present to the committee for examination?—A. Well, I have some notes, Mr. Chairman, that I might read following the lines of your suggestions in the letter you sent me.

Q. Very well. We would be glad to hear it now.—A. The first question that you ask me to deal with was my opinion of the general fuel situation in Eastern Canada. The war, of course, has changed the conditions very materially.

Q. Will you speak a little louder please?—A. I say the war of course has changed conditions very materially and there have been constant disturbances in the coal trade since the war ended that have brought about these conditions of high prices in the middle provinces of Canada as well as in the United States and Great Britain. The conditions in the coal trade even now are very much disturbed by reason of the English strike, which is still on. Up to about November 1 there was a steady and firm demand for all the coal that could be produced for the Canadian trade as well as a demand for surplus production either for bunker coal or for export. Between November 1 and December 1—

By Mr. McKenzie:

Q. That is of last year?—A. 1920. The indications all pointed to a collapse in the iron and coal trades throughout the world, not only in Canada but in Great Britain and the United States. The consumption of coal has decreased very materially in all our manufacturing industries and also decreased very largely in the manufacturing industries of the New England states by reason of the closing down of the textile mills, woollen mills and various manufacturing concerns. Then contracts which were made for shipments of coal to Europe were suddenly cancelled by the buyers and this was brought about very largely by the increased production of the German mines. Coal that had been sold for export to Holland and to France, the orders for which had been cancelled, this coal was supplied by the German mines either under the reparation agreement or by reason of the fact that the Belgian coal that had formerly been used in Belgium was all released and was being sold to the different countries in Europe at lower prices. We made some contracts in August, 1919, for shipments of coal to Holland and to France over the winter months beginning on November 1, 1919, and up to April 1, 1920. These contracts were made at a time when we expected that we would have a surplus of coal in Nova Scotia because the navigation to the St. Lawrence closes about November 1. Production at our mines was decreasing in the autumn of 1919, but we rather anticipated that there would be a very substantial increase in production in 1920, which we did not get. In the spring of 1920 a serious coal shortage developed in the United States and also in Europe, and at the end of June, 1920, when Parliament was in session, an Act was passed empowering the Railway Commission to take control of the distribution of Canadian coal. An embargo was placed on exports on August 1 and we were therefore unable to fulfil our contracts for the shipment of coal to Europe, and that embargo was continued and finally lifted about February 12, 1921. The coal that we had sold for export was distributed through the eastern parts of Canada and also in Newfoundland. We supplied to Newfoundland last year, I would say, about 250,000 tons of coal. In former years the coal for the Anglo-Development Company in Newfoundland had been shipped out from England and Scotland in steamers that carried pulp back to England for the use of the

[Mr. Alexander Dick.]

Northcliffe Paper Mills. They took pulp and paper back. The Canadian National Railways asked us to give them more coal than they took the previous year by reason of the fact that they were unable in the spring of 1920 to get from the United States companies from whom they had been purchasing formerly all the coal that they had expected to get. The American coal companies were making contracts in Montreal in the spring of 1920 at \$8.50 to \$8.75 per net ton delivered in Montreal, but they had inserted certain clauses in these contracts to protect them in the event of any increase in wages, strike conditions, anything in fact that might bring about any change in the conditions of the trade, and the result was that they practically repudiated most of those contracts and they charged the people with whom they had those contracts before the end of the season as high as \$16 a ton for the coal that they delivered in the Montreal market. As a result of this change in the American conditions in the summer of 1920 many of the large manufacturers who were apprehensive of the coal shortage this winter bought large quantities of coal, more than they would have used under normal conditions, and to-day we find that most of the pulp companies, for instance, in the province of Quebec have sufficient coal on hand to last them until next August. They tell us they are not in the market, and that they will not make any purchases until they know what their business is going to be this year, and as a matter of fact, at the moment there is a surplus production of coal in the United States, and the prices are back to where they were in 1919.

By the Chairman:

Q. You are speaking now of bituminous coal?—A. All bituminous coal. On account of the collapse of the coal trade in the United States they have been offering coal at the mines as low as \$2.10, and according to the evidence submitted by the National Coal Association at Washington, the average cost of production of this coal, which does not include any overhead or fixed charges or interest, is given at \$2.34 to \$2.76 per net ton at the mines.

By Mr. Cowan:

Q. What did you say they were selling it for?—A. They are selling it for \$2.10.

By the Chairman:

Q. Which of the American fields?—A. That is coal from Pennsylvania and Virginia. They were caught so badly by the collapse of the trade that they had on hand in December and January about half a million tons of coal on cars at Norfolk, Newport News and Baltimore, and the cars were backed up to the mines to such an extent that they had to suspend operations at the larger collieries; and the best informed coal men in New York told me that at least 600 American coal mines have been obliged to close down, because they were unable to train the market for their products. All this has had an effect on the conditions here. The collapse of the trade was unforeseen by most men throughout the world, and the abnormal conditions were brought about by the sudden collapse of the general trade of the world, especially in shipping. I desire to give the committee all the information I have, and so I will state that the English situation briefly is this: In the month of August, 1920, there was a coal strike in England, in the settlement of which the British Government undertook to market and dispose of the coal at the mines and establish a pool, through which the coal operators of the smaller mines were compensated for losses, and this money was taken out of the earnings of the larger companies, who were making more per ton. The British Government established a price for coal at the pit mouth for home consumption, and took control of the coal for export.

By Mr. Cowan:

Q. Did they charge a higher price for export coal?—A. They sold the coal for export at 140/- per ton, about \$28 per ton; that was the price they sold coal to Euro-

[Mr. Alexander Dick]

peans. They continued to charge those prices until about November 15, when the competition of the German and Belgian coal became more serious, and they lost their market for their export coal, and the price for export coal dropped from 140/- to about 40/- to 45/- per ton. The result of that was that the British Government found their coal was costing them 53/- a ton (as you will no doubt have learned from the statement made by Mr. Lloyd George) and the average price at which they were selling it was 40/- a ton; so that the British Government was losing \$2.60 a ton on the operation of the British coal mines. When that happened, they decided that instead of de-controlling the mines on the 1st August, which had been the understanding between themselves and the miners when the settlement was negotiated, and before the Coal Emergency Bill was passed in August, 1920, they de-controlled the British coal mines on the 1st April, 1921, since which date the British miners have been on strike because they cannot come to any understanding with the Government as to continuing the pooling arrangement and reimbursing those who lost money on the small mines out of the profits of those who made money on the larger mines. That, briefly, is the situation on the foreign market.

The most serious phase of the situation so far as the collieries of the Dominion Coal Co. are concerned is that the consumption of coal of the steel works (I refer to the Dominion Steel works) has dropped since December 1st, from 100,000 tons to an average of 40,000 tons per month. That is, on account of the closing down of the blast furnaces the steel company is using 60,000 tons less coal per month, and as the steel works at Sydney were originally intended to provide a steady winter's market for the coal in Cape Breton, this is, of course, having a very serious effect on the miners, and the other employees of the company. In the summer, the steel works serve a very useful purpose for us in providing an outlet for the slack coal we produce, which is always a very difficult type of coal to sell as compared with the steam coal. There is one very serious feature in the collapse of the American coal trade, which I think I ought to bring to the attention of the committee. In my investigations I have found that the American coal operators are using the Canadian market for dumping purposes. Whenever they have what they call "distress" coal, that is coal on cars and the cars under demurrage, they usually offer this coal in Canada at a lower price than they operate through the United States; they do not want to break their own market at home so they naturally prefer to sell this coal at a lower price outside of their own country. That might be blocked by the application of the Dumping Clause of our tariff, but apparently they are not doing that.

By Mr. Douglas (Cape Breton):

Q. Please define "distress" coal.—A. Distress coal is known in the trade as coal for which there is no sale and is loaded on cars or stored in some coal pocket where it must be released within a given time, or extra charges paid for storage and demurrage on cars.

Q. What will be the difference between that and "spot" coal?—A. Well, that is practically the same thing. The practice in the American trade is to say, when quoting coal, "We will ship 25 carloads of "spot" at so much, an decontract for so much". That is to say they are at present establishing a differential on their coal of say, 50 cents to 65 cents as between spot coal and contract coal. They are unwilling to take the risk of anything happening that would give them a better price in the next six months.

By Mr. Cowan:

Q. Spot coal may be distress coal?—A. Yes, it probably would be what they call distress coal.

By the Chairman:

Q. Do you think the price which the Canadian consumer is paying for coal to-day indicated that the American coal operator is dumping his coal on the Canadian

[Mr. Alexander Dick]

market?—A. That depends, of course, on what you mean by "coal." For instance, the average Canadian consumer of coal consumes anthracite coal for house use.

Q. I am speaking of bituminous coal?—A. I would say that the price the large manufacturers are paying for coal to-day would indicate they are getting coal at less, in many instances, than the cost of production in the United States.

By Mr. Ross:

Q. What is that price?—A. A contract was closed the other day in Montreal for slack coal to be shipped from the Pittsburg district at \$1.80 per net ton, f.o.b. cars.

Q. What about bituminous coal?—A. That is the same thing. Bituminous coal is the coal represented by the softer varieties.

Q. Is not slack coal an inferior quality of bituminous coal?—A. It is what is screened out. You take bituminous coal and separate it into different sizes, sort out the lumps and take out what are called stove coal and nut coal and you get slack coal. In Nova Scotia we have only three sizes of coal, run-of-mine, screen coal and slack coal.

Q. But they are of about the same quality for combustion purposes?—A. Well, as a rule, the percentage of ash in slack is slightly higher than in screen coal, because any part of the fire-clay that comes out in the mining might become assimilated with the screen coal, but there is not a very great difference.

By Mr. Douglas:

Q. What is the duty on slack coal?—A. It is only 14 cents a ton. Most of the manufacturers and the people in Ontario and Quebec have now installed these mechanical stokers to such an extent that I think you will find we are importing into Canada from the United States over 3,000,000 tons a year of slack coal.

By Mr. Ross:

Q. Do you say you are getting slack coal for \$1.85?—A. That is an instance I know of, a cement company.

Q. What is the average the manufacturers are getting it at?—A. The manufacturers to-day can buy slack coal from the United States at \$2.25 a net ton at the mines.

Q. What does the domestic consumer in Montreal get bituminous coal for domestic purposes for?—A. Do you mean the run-of-mine coal?

Q. The coal ordinarily used in homes for domestic purposes.—A. In Montreal, except in apartment houses, there is very little bituminous coal used for house purposes, but the average price of American coal in Montreal to-day is between \$8.50 and \$9 a net ton delivered to the consumer.

Q. Is not that too much?—A. Freight, exchange, duty, and the cost of delivery have to be added.

Q. Just figure it out for us and let us see why the retailers should be charged that much?—A. The retailer pays, say \$2.75 at the mine for the coal.

Q. Yes?—A. If he brings the coal by rail he pays \$4.53 freight.

By Mr. Cowan:

Q. That is, if he brings it by rail all the way?—A. Yes.

Q. Which is not usually done?—A. It is done at this season of the year, and in the summer the coal comes by water.

By Mr. Ross:

Q. Let us take the water rate?—A. He pays on this coal which he brings in that way \$2.75 (that \$2.75 is in American funds), 76 cents exchange, and 53 cents

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duty, total \$8.57. Now, there is no profit on that for the dealer who gets that coal in Montreal. He has to take that coal in, and, in many instances, discharge the car in the yard.

Q. And he has to deliver it?—A. I am not including delivery. He sells that at a profit of 50 cents a ton, making \$9.07; but he usually takes less profit.

Q. What is the charge for freight, water rate?—A. If he gets this coal at \$2.75 he has to pay \$1.95 and loading charges to Lake Erie then he pays \$2.25 to Montreal by vessel, then he has to pay the exchange on the \$4.70, which is 61 cents, and the duty is 53 cents, then he has to discharge that coal at Montreal and it costs him 40 cents for that, and he has to pay the Harbour Commissioner's charge for wharfage, 8 cents a ton, which comes to about the same thing.

By the Chairman:

Q. Does not the high freight rate and the exchange practically counteract any advantage which the privilege of dumping is giving to the Americans?—A. It has a tendency now to check the dumping, but if he sold all his coal here at \$2.75 instead of selling some of it at \$2.10, the Canadian operator would pay a difference of 65 cents in his favour.

Q. Yet the rate at which that coal can be sold in Montreal is sufficiently high to protect the Canadian operator?—A. Yes, we are offering coal in Montreal usually at \$8.50 a ton on the wharf.

By Mr. Cowan:

Q. That is the competitive price you have to meet?—A. Yes.

Q. And if your coal is of equal quality you do not have to reduce that?—A. No.

By Mr. Ross:

Q. You say it costs \$1.95 to go from the mine to the Lake head, Buffalo, or wherever it is?—A. Yes, they ship mostly at Ashtabula, Erie or Cleveland.

Q. There would be the same rate of freight from the mine to Cleveland, and you figure it costs so much from Cleveland to Montreal?—A. Yes.

Q. Supposing that coal was shipped across the Lake to Port Burwell or Port Stanley, forty or fifty miles, what would be the rate?—A. I do not know the rate but I do not think it would be practicable.

Q. I am trying to help Western Ontario just now, places like London?—A. Does not Western Ontario get most of its coal at Port Burwell, Port Stanley and Cobourg?

Q. That rate should be less coming through there?—A. Yes.

Q. You cannot give me that rate?—A. No.

Q. Who can give the committee that rate?—A. Well, I should think any of these Toronto coal men would give it to you.

By Mr. Cowan:

Q. You said a little while ago that there had been a very substantial drop in the price of coal at the mine in the United States?—A. Yes.

Q. And a very substantial drop in coal in Great Britain at the mine?—A. Yes.

Q. And on the Continent?—A. Yes.

Q. And there has been no drop in the price of coal at the mine in your district?—A. Oh, yes.

Q. Nothing like in comparison with these others?—A. Well, we never got anything like the prices they did in the States and England. For instance when we were selling coal at Sydney for bunker purposes at \$12 and \$14 a ton, they were charging at Norfolk and Newport News for the same purpose, bunker coal, \$18 to \$20 a ton, and in England \$28 to \$32 a ton, but on account of the embargo we distributed most of our coal through Nova Scotia and New Brunswick last year, at a price of \$6.25 per

[Mr. Alexander Dick]

net ton for run of mine coal and \$6.75 to \$7 a ton for screen coal, and on December 1, following a decision that we were obliged to give a very large increase in wages to our workmen, which came about through negotiations in November—beginning in October and closing in November—we increased our price \$1.00 a ton on December 1.

Q. But there has been a very much greater drop in all these places, and to a much lower point than in your own? How do you expect to complete with these other points?—A. We could not afford to have the drop they had, because they were getting just as much as we were getting for their coal. We were supplying our customers at a steady price while the other people were speculating. In May, 1920, for instance, the American operators in Pennsylvania were selling their coal at \$3.25 a ton, and they gradually put that price up until they got \$10.50 at the mines in July, and I know of cases where coal was bought as high as \$11 a ton at the mines, coal which they had offered in the spring at \$3.25.

Q. From what you say, and from what Mr. Wolvin said yesterday, I should judge you are trying to make up for the loss you sustained while the embargo was on.—A. No, we have not changed our prices in any way to make up for the losses incurred by reason of the embargo.

Q. But you have not reduced them?—A. No.

Q. Do you not think it would be better for you to take your loss now, and start off with a clean sheet, as the others are doing?—A. There are two kinds of people in the coal business, those who sell their coal without any profit, and have to close their mines down, and who are characterized as fools if they lose their positions, and those who are regarded as charging too much, are called robbers, and the fact of the matter is that the Canadian coal companies, especially the Nova Scotia Coal Companies, have stabilized prices more during the war than any coal companies in Canada except that the coal operators in Burwell have been very fair in their prices. So far as the United States and Great Britain are concerned, however, we have sold our coal at 50 per cent lower than they have sold in times of stress.

Q. That may be, but we are dealing with the present conditions. To-day the Canadian manufacturer is confronted with the necessity of competing with the manufacturers in all other parts of the world. The American manufacturer gets this cheap coal and the Canadian manufacturer must either buy the cheap American coal and pass up your company, or go out of the foreign market?—A. No, the trouble with the Canadian manufacturer is that he does not want to buy coal at the present time. I was looking over Mr. Caye's evidence, which indicates pretty generally the attitude of the buyer of coal at the present time, and I think you asked Mr. Caye why we did not buy coal, and he replied that he had a two and a half months' supply of coal on hand, and was sitting tight. In other words, he is simply waiting until the market becomes more depressed, and he thinks the conditions are more favourable for buying coal.

Q. The Algoma Steel Company are competitors of yours?—A. Yes.

Q. They are undoubtedly getting cheaper American coal?—A. Yes.

Q. And they got a contract from the Government for fifty thousand tons at a price you would not take?—A. Quite so.

Q. Then would it not be more profitable for you to get down to a competitive basis at once?—A. My business is not connected with the steel manufacturers.

Q. There is the result?—A. All I can tell you is that the steel people tell me they cannot take that order and make any profit on it because they are operating under different conditions from those obtaining in Algoma. As I understand it, the Algoma not only imports its coal but imports its ore from the United States, and the coal which the Algoma Company brings into this country to manufacture steel in competition with a Canadian industry is really a refund of all the duty.

[Mr. Alexander Dick]

By Mr. Keefer:

Q. We are beginning to think it is better to let in all soft coal free of duty, in view of the situation in Ontario where we are paying duty and getting no coal?—A. I am not going to argue about that.

Q. The question of the duty hurts us very much when we see you cannot give us the coal?—A. I have not finished yet.

Q. I am speaking about Mr. Wolvin's testimony?—A. I have not found any man in Ontario who wants coal.

By Mr. Douglas:

Q. The duty is all rebated for the manufacturer of steel.—A. Yes, 99 per cent.

By the Chairman:

Q. I think we interrupted your statement, Mr. Dick.

WITNESS: The practice generally in the province of Quebec—I cannot speak authoritatively of the province of Ontario—but the practice generally in the province of Quebec is that the dealer using bituminous coal, selling and reselling it, is to bring in 50 per cent of American lump coal on which he pays the 53 cents duty; 50 per cent American slack coal, on which he pays 14 cents duty and to sell it as run of mine coal, thereby saving 20 cents a ton on coal that the Government should be getting.

By Mr. Keefer:

Q. On that question of duty, how much coal have you for sale other than your own wants?

Mr. DOUGLAS (Cape Breton): May I ask that Mr. Dick be allowed to confine himself to the statement he is making?

Mr. KEEFER: He wanted to break in on the duty question.

The CHAIRMAN: I think Mr. Dick had better finish his statement.

WITNESS: I am here to give the committee all the information I possibly can.

Mr. KEEFER: We will take up the duty later.

WITNESS: You have asked me to give you a detailed statement of the sales of the Dominion Coal in the provinces of New Brunswick, Quebec and Ontario from 1914 to 1920.

The CHAIRMAN: Have you the statement prepared?

WITNESS: I have it prepared.

The CHAIRMAN: Does the committee wish Mr. Dick to read it or would it be sufficient to incorporate it in the record?

Mr. DOUGLAS: I think he better read it.

Mr. McKENZIE: Read it and pass it in. That is what we would like to hear.

WITNESS: Nova Scotia, 1,146,202 tons. That includes the coal used by the Steel Company. In Quebec, 1,866,275 tons; in Ontario, 29,168 tons; in New Brunswick, 289,107 tons; Newfoundland, 114,599 tons; Prince Edward Island, 28,135 tons. In 1915 Nova Scotia took 1,673,935. I think I will leave out the odd hundred pounds. Quebec, 1,588,000; Ontario, 18,000; New Brunswick, 271,000; Newfoundland, 158,000; Prince Edward Island, 27,000. That was the last big year we had on the St. Lawrence. That was the year after the war broke out. In 1915 conditions were normal. At the end of 1915 and the beginning of 1916 the British Government commandeered all our coal-carrying ships practically.

STATEMENT DOMINION COAL "SALES IN PROVINCE", 1914-1920.

GROSS TONS.

	1914	1915	1916	1917	1918	1919	1920
Nova Scotia.....	1,146,202	1,673,935	2,173,107	2,028,640	1,948,340	1,720,366	1,577,625
Quebec.....	1,866,275	1,588,709	659,182	207,287	55,119	340,880	145,820
Ontario.....	29,168	18,944	7,233		3,786	3,240	203
New Brunswick.....	289,107	271,781	368,461	420,662	393,734	243,998	351,872
Newfoundland.....	114,599	158,645	170,530	173,143	185,270	172,445	208,714
Prince E. Island.....	28,135	27,019	34,726	43,534	44,804	26,171	38,169

STATEMENT SPRINGHILL SALES IN PROVINCES, 1914-1920.

GROSS TONS.

	1914	1915	1916	1917	1918	1919	1920
Nova Scotia.....	111,991	105,743	120,592	126,108	132,720	134,615	154,752
New Brunswick.....	177,040	176,242	139,653	140,703	146,477	165,180	192,102
Quebec.....	17,446	41,657	14,977	27,968	21,304	17,940	11,175
Prince E. Island.....					566	1,264	798

Including Railway Deliveries.

By Mr. Keefer:

Q. Would you state how much you put into Quebec that year?—A. 1,588,000.

Q. How much into Ontario?—A. Ontario, 18,944. In 1916 we sent into Nova Scotia, 2,173,000; Quebec, 659,000; Ontario, 7,000; New Brunswick, 368,000; Newfoundland, 170,000; Prince Edward Island, 34,000. In 1917, Nova Scotia, 2,028,000; Quebec, 207,000; New Brunswick, 420,000; Newfoundland, 173,000; Prince Edward Island, 43,000. In 1918, Nova Scotia, 1,948,000; Quebec, 55,000; Ontario, 3,786 tons; New Brunswick, 393,734; Newfoundland, 185,000.

Q. The Ontario coal, would that be railway coal?—A. No, that was coal, Mr. Keefer, that was taken at Montreal by barges and brought up the Ottawa river.

Q. You would not lose any money on that coal?—A. No.

By Mr. Cowan:

Q. You would be selling it at a profit? Are there any conditions to-day which would make it unprofitable for you to do what you did that year?—A. We are doing precisely what we did that year, selling it at the current prices in Montreal. New Brunswick, 393,000 that year and so on. In 1919 we sent more coal to Quebec. Nova Scotia, 1,729,000; Quebec, 340,000; Ontario, 3,340,000; New Brunswick, 343,000; Newfoundland, 172,000; Prince Edward Island, 26,000. In 1920—this is the calendar year I am giving you.

Q. 1920?—A. Nova Scotia, 1,575,000; Quebec, 145,000; Ontario, 203 tons.

By Mr. Keefer:

Q. That million and some odd to Nova Scotia, what would that be for?—A. That includes the Steel Company, local consumption in Nova Scotia. That is bunker coal.

Q. Export trade?—A. No, the export trade would be additional to that. I have not got that in there.

Q. It does not show that?—A. I don't know whether I have that.

Q. We have that in the governmental returns?—A. Yes. I want to say in answering that question that Nova Scotia Government's coal year ends the 30th of September. It runs from October 1 until September 30, so that there may be differences in the figures on account of the differences in the time in which the statements are compiled.

[Mr. Alexander Dick]

By Mr. Douglas (Cape Breton):

Q. Did you give 1920?—A. Yes, I read 1920.

By Mr. McKenzie:

Q. Do you send any coals to Ontario in 1920?—A. Practically none, 200 tons

By Mr. Keefer:

Q. We better let him finish the statement.

By Mr. Douglas (Cape Breton):

Q. I was going to ask you—Nova Scotia seems to have gone up very high in the years you have quoted. Do you include bunker coal as Nova Scotia?—A. Yes, in that statement.

Q. It is classified as Nova Scotia coal?—A. I have a statement showing the bunker coal separately. Now you have asked for the production of the Dominion mines although you probably got that in other ways. You have asked me to produce it. I am not familiar with the way in which the costs of coal are compiled by our accountants in the collieries, and that was looked after yesterday by the resolution of the committee.

Q. You have asked me as to the quantities of coal we sell to the Canadian railways. I have a statement prepared on that which I will put in.

Mr. KEEFER: That would be too voluminous to put into the record. I think we better file it as an exhibit. Don't you think so, Mr. McKenzie.

Mr. MCKENZIE: Leave it with us and if we decide afterwards it should be included, we can do so. It is not as voluminous as some we have already had.

DELIVERIES TO CANADIAN RAILWAYS.

CAPE BRETON COLLIERIES.

1914-1920.

	1914	1915	1916	1917	1918	1919	1920
Canadian Government Railways—							
St. Lawrence.....	26,808	6,280					
Halifax.....			70		1,510	50	
Sydney.....	56,209	28,121	139,123	240,328	216,264	137,067	175,285
Total.....	83,017	34,401	139,193	240,328	217,774	137,117	175,285
Canadian Pacific Railway—							
St. Lawrence.....	534,441	377,114	104,499	20,003		27,226	
St. John, N.B.....	83,969	76,661	151,855	137,255	66,804	38,152	94,799
Halifax.....	10,078	948	1,224	5,629	1,562		
Sydney.....			1,517	48,787	74,096	42,955	
Total.....	628,488	444,723	259,095	211,674	142,462	108,333	94,799
Grand Trunk Railway—							
St. Lawrence.....	469,153	358,437	106,630	30,455	13,393	69,684	11,713
Grand Total—Dominion.	1,180,658	837,561	504,918	482,457	373,629	315,134	281,797

SPRINGHILL COLLIERIES.

Canadian Government Railways.....	103,219	121,797	97,477	92,929	102,269	86,795	89,917
Atlantic, Quebec and Western Railway.....	7,174	5,180	7,699	9,876	11,229	10,310	7,136
Caraquet and Gulf Shore Railway.....		948	997	1,333	979	1,054	715
Canada Gulf Terminal Railway.....		1,141	1,315	1,538	1,972	1,783	1,429
Lotbiniere and Megantic Railway.....	655	500	850	1,079	912	783	309
Grand Total—Springhill...	111,048	129,566	108,338	106,755	117,361	100,725	99,506
Combined Totals— Dominion and Springhill..	1,291,706	967,127	613,256	589,212	490,990	415,859	381,303

WITNESS: You have asked me for a statement of the coal we sold for bunker purposes each year. The coal we have sold for bunker purposes to ocean-going steamers since 1914. I have a statement showing that. Will I put that in?

Mr. DOUGLAS (Cape Breton): Perhaps it can be read.

WITNESS: I might say in explanation of this statement that the demand for bunker coal for the coaling of the ships—

By Mr. Cowan:

Q. That is the coal the ship itself uses on its voyage. I am a landlubber. I want to know that.—A. I don't think bunker coal is the coal consumed by the ship itself on the trip across the ocean. It is usually termed bunker coal. It is the same kind of coal except it is called bunker coal.

By Mr. Douglas (Cape Breton):

Q. When ships take bunker coal in Nova Scotia you call that in your statement Nova Scotia coal?—A. Yes.

Q. Supposing you put that into the ship in Montreal?—A. We put that in as sales, and I have had it segregated to give all the bunkers in 1914. We supply bunker coal at the ports of Sydney, Louisburg, St. John, N.B., and Halifax to ocean-going steamers. In 1914, ocean-going steamers, 208,106 tons. That was the first year of the war.

Q. What did you supply in bunker coal at Montreal that year?—A. 82,432 tons. That was ocean boats. Then we supplied for Canadian coastal boats in Montreal that year, that is boats for river service and in the Canadian coast trade, 62,000 tons; and we supplied for steamers plying around the coast of Nova Scotia, different places, Halifax, St. John, and coastal service, 84,600 tons. In 1915, there was an extensive increase. We supplied ocean service 409,500 tons. At Montreal we supplied the river boats 88,800 tons; ocean steamers at Montreal 50,000 tons, and other Canadian coastal boats 40,000 tons. In 1916, ocean service, 528,000 tons. That includes the same places. I will give you that afterwards. St. Lawrence, for the river steamers, etc., 129,000 tons; ocean boats, St. Lawrence, 1,600 tons; other boats in the St. Lawrence, 19,000 tons. In 1917, we supplied ocean steamers 372,500 tons; St. Lawrence steamers, 177,000 tons, and other steamers, 13,600 tons. In 1919, ocean boats at the lower ports, 308,600 tons; St. Lawrence, 68,200 tons; river steamers, 47,700 tons, and others, 13,000 tons. In 1920, we supplied in the ocean steamers 434,200 tons, and other boats in the coastal trade 123,000 tons. We did not do any bunkering in the St. Lawrence in 1920. The Railway Commission ruled that the boats in the St. Lawrence instead of taking American coal that was coming into Canada, which it would be very

[Mr. Alexander Dick]

difficult for them to arrange at Washington to get, that that should be prevented, and the boats should come down and take their coal at the lower provinces for their ocean voyage, for their Transatlantic voyage.

DOMINION COAL CO., LIMITED.

BUNKER COAL.

	1914	1915	1916	1917	1918	1919	1920	Total
Ocean Service excluding St. Lawrence coaling.....	206,108	409,500	628,136	372,517	254,654	308,602	434,260	2,613,777
Domestic Bunkers excluding St. Lawrence coaling.....	84,650	88,806	129,548	177,561	196,388	68,215	123,573	868,741
Ocean Coaling St. Lawrence.....	82,434	50,273	1,611	151	2,600	47,716	.....	184,784
Domestic Coaling St. Lawrence.....	62,166	40,777	19,509	13,699	.....	13,821	.....	149,977
Total per year.....	435,358	589,356	778,804	563,928	453,642	438,354	557,833	3,817,279

By Mr. Cowan:

Q. The boats were taken off?—A. Yes.

Q. Will you proceed to treat the bunker business as you have been doing?—A. We'll bunker, every one we can get.

By Mr. Douglas:

Q. The result was the embargo did not hurt the Dominion Coal Company's business?—A. No, the coal that would have gone to the St. Lawrence was absorbed by bunkering boats at other points or else it was distributed amongst our customers. It did to some extent affect the earnings of the Coal Company, but it did not affect the working of the Dominion Coal Company.

By Mr. Keefer:

Q. If you were able to export that you would get a good price for it?—A. Yes.

Q. You may be benefited by it financially?—A. The only possible effect, if the embargo had not existed we would get what the Americans were getting, \$18 or \$20 a ton.

By Mr. Cowan:

Q. Do you claim that the high prices you are compelled to pay for that coal is due to high wages at the mine?—A. I am not concerned about the question of wages. My duties are to sell the coal.

Q. You said conditions were due entirely to American strike conditions which were imported into Canada?—A. I did not say that.

Q. You made reference to American strike conditions. I am talking of the effect American strike conditions had on coal prices. You are not willing to discuss the question of wages at all to your miners?—A. That is not my particular business.

Q. You don't know whether wages in the United States have come down since the war?—A. No, they have not come down, because they have an agreement with the mine workers in the United States that they made last year that lasts two years and does not expire until March 31, 1922.

Q. Or April 1, 1922?—A. I know that.

Q. If wages have not come down and the prices have come down, it is quite evident the mine owners are losing heavily or they were making an awful profit before, one or the two.—A. It is admitted they were making enormous profits before. Such price were unheard of in the United States. It is phenomenal.

[Mr. Alexander Dick]

By the Chairman:

Q. You are general sales agent for the Dominion Coal Company. You have not told us of the method you use in order to dispose of the coal produced by the Dominion Coal Company?—A. We usually try to find the best possible market in which to sell our coal and make the most money for the company, and we have canvassed every possible market in an effort to find business, and during the years I have been connected with the company at the head of the Sales Department I have left very little territory unexplored. I have personally gone into the province of Ontario in 1914 and 1915, when we had a surplus of coal, and conditions were very different. We had the low rates of freight in our ships and we found that American competition was so severe that we could not possibly get beyond Brockville or Ottawa at this end. I don't think we ever succeeded in getting beyond these points, where we were met with American competition, and cheap coal coming in from Pennsylvania and Ohio. If you will permit me to continue for a minute; the great problem in the Nova Scotia coal field has always been to find employment for the men to keep the collieries in operation during the winter months. The first organized effort to find markets was made after the formation of the Dominion Coal Company, which was the organization of all the small companies in existence in 1893 by Henry M. Whitney, and after Mr. Whitney got into operation he found the great trouble he had was to keep up continuous employment, and thereby have stabilized labour conditions, and a uniform cost of production to sell his coal wherever it was possible to do so on anything like a profitable business basis. He made five year contracts with the railroads. He built up the most up-to-date modern discharging plant that could be built at that time in Montreal where we could take out a thousand tons an hour out of an ocean-going ship. We can discharge 10,000 ton ships in twelve to fourteen hours, clean them up, and send them back to be re-loaded. He built very extensive coal piers at Sydney where the ships could be loaded quickly. Then when he was confronted with this question of market he organized amongst a group of capitalists with whom he was associated a very large concern known as the New England Gas and Coke Company of Boston, that was found to be the outlet for all the slack coal which was then produced in that part of the country. At that time the scheme was made large enough so that in the winter months we could ship coal to Boston and distribute it in New England. They made railroad connections at Everett for that purpose. At that time it was anticipated that the duty on coal going into the United States would be taken off, but that did not happen and so far as the large scheme for coal distribution was concerned, that was dropped. But they continued between 1899 and 1905 to make heavy shipments of slack into Boston.

By the Chairman:

Q. This is all very interesting, but it is not very useful to the committee, this historical review. A. I am coming to the point about finding the market.

By Mr. Chisholm:

Q. I think this is very important. It is leading up to something.—A. They formed this company; they manufactured coke in Boston, which was intended to replace anthracite coal. That is what I am leading up to. They began to make coke and they sold this coke to try to introduce it into the Boston market. They sold it in ten pound paper bags.

By Mr. Keefer:

Q. Speaking of the market, how much coal have you for sale over and above what you need to supply Newfoundland?

The CHAIRMAN: Pardon me, Mr. Dick was in the middle of a statement.

[Mr. Alexander Dick]

WITNESS: Distributing coke from grocery stores in ten pound bags in order to try to introduce this coke in place of anthracite coal in the United States. The result was that the New England Gas Coke Company became insolvent, and the contract we had with them was abrogated about that time. The Steel Company at Sydney, which was being constructed, came in and replaced the New England Company to provide part of the market for the winter months. James Ross was then president of the company, and Mr. Ross, after he had made a thorough canvass of the possibilities of getting coal into Ontario thought he should establish European connections. I went over to Europe and I spent six months in Europe finding a market for coal. I sold 50,000 tons to the Swedish government for their railway. I travelled through France and Italy in 1902. I went over to Norway and Sweden and I went down through Germany and saw the coal fields; went over France and went down to Italy, and I made some connections; sold some coal over in that part of the country and we found that competition there was so keen with the coals in Europe that we were only able to sell the coal during the winter months when we could get very low freight rates.

Mr. KEEFER: We have nothing to do with that question.

By Mr. Chisholm:

I think I see the point.

WITNESS: You have been asking me how we tried to find markets for the coal.

By the Chairman:

Q. With reference to your present methods?—A. I want to show you, Mr. Chairman—

The CHAIRMAN: If the committee wishes to hear it I have no objection at all.

Mr. DOUGLAS (Cape Breton): I don't think this testimony should be limited or restricted in any sense.

Mr. KEEFER: The point is we are here to get the coal in any way.

The CHAIRMAN: If the Committee wishes to hear Mr. Dick—

Mr. COWAN: Let him go on. It will finish up in a minute. It is of value to me, and one point I want to find out later on.

WITNESS: Well, I do not quite know just where we were, but I think we were trying to sell coal in Europe, and what I want to say to the committee is this, that if we can sell coal in Ontario at a reasonable profit, a fair market value, we are always ready and anxious to do so, and we have made large contracts with the railroads in the past, and they have scaled the price down in Montreal, (in order to put us on a competitive basis) to the point at which they claim in Ontario they can get American coal, and we have been faced with the American competition in the province of Ontario, and in Montreal.

By Mr. Ross:

Q. But you have got as far west as Brockville?—A. Yes, in 1914, and 1915, we were as far west as Brockville.

Q. What would you suggest as a practical way of getting into the Ontario market? What can be done in a practical way to get Nova Scotia coal into Ontario? That is what this committee desires to know?—A. The only way the Government can help us is in the matter of transportation.

By the Chairman:

Q. What determines the price at which you sell coal?—A. I fix the best price I can get in competition with the other man that is selling his coal.

[Mr. Alexander Dick]

By Mr. Cowan:

Q. Have you any objection to telling us what you do consider to be a reasonable profit?—A. Well, there are so many factors entering into that question that I would not care to answer it offhand. As a matter of fact, most of the coal that is sold, that is size coal, has the other coal taken out of it, which has to be sold at a lower price, and there are so many factors entering into the question of what is the average price of coal at the mines after you have got these things put together, and after you have made your deductions, that I do not know that I would care to say.

By Mr. Ross:

Q. Have you anything else to suggest with regard to the question of supplying Ontario with coal?—A. Yes. Now, Mr. Keefer, we have got as far as Ottawa.

The CHAIRMAN: I would like to ask a question before the witness proceeds.

By the Chairman:

Q. You say you sell the coal at the best price you can get in competition with other coal operators?—A. Yes.

Q. On what information do you base your cost price?—You consider not only the price other coal operators are asking, but you must have some information as to the cost of your coal.—A. We are not going to sell it at a loss. Our people have agreed to furnish me with these costs.

Q. But when you are talking prices in an endeavour to make a sale of coal, what determines the price?

By Mr. Ross:

Q. After you get the costs?

By the Chairmans

Q. The costs are given to you?

By Mr. Ross:

Q. What percentage do you add?—A. Well, we do not base it on any percentage basis.

By Mr. Keefer:

Q. Something like the old definition of freights, "All the market will stand"?—A. No, not exactly. We have to take into consideration the size of the contract and the period over which it extends, and the probable conditions that may arise.

Mr. MACKENZIE: We passed a resolution yesterday that we were to get full details in the shape of a statement. Will not that afford us the information we now require?

The CHAIRMAN: That is not what we are endeavouring to ascertain. I am not going to ask Mr. Dick what the costs of the coal are, but the committee desires to know what principle they follow in determining the price which they ask from a prospective purchase.

By the Chairman:

Q. Do they add a certain percentage, a reasonable percentage to the cost of the coal, or do they determine the price which is asked by the price which the competitors in that field are asking?—A. That is what we do as a rule; that is what we are forced to do.

Q. That is, if the competitors are asking an abnormal price, you are not satisfied with a reasonable profit on your coal?—A. As a rule we do not have a free hand

[Mr. Alexander Dick.]

in that. For instance, in dealing with the railroad companies they say, "We can buy American coal, delivered here at so much." Now, in 1920, (while we are on this subject of determining prices) the Canadian National Railways began negotiating with us for coal and we offered them 400,000 tons at \$5 f.o.b. vessel at Sydney. They came back to us with the proposal that we deliver this coal at \$5.90 at Quebec, or \$5.40 at Montreal. We declined their offer because we could not undertake to freight coal from Sydney to Quebec at 90 cents and to Montreal, a greater distance, at 40 cents, and they knew it at the time, but they simply put us up against a price at which they can buy coal, and Mr. Caye showed this committee where he could buy coal at \$7.92 on a \$2 freight rate, and a 400-mile haul, charging the public for the same distance \$4.53.

By the Chairman:

Q. You are anxious to get into the Ontario market, and the Ontario domestic consumer is very anxious to get coal?—A. Quite so.

Q. Are you prepared to place on the Ontario market for domestic consumption your coal at a fairly reasonable profit over cost, or is the price which you are prepared to ask the Ontario domestic consumer the highest price you can obtain in competition with the American coal operators who supply the Ontario market now?—A. I think that if we sold the Ontario consumer of coal to-day, coal at the price at which he can buy it in the United States at any point beyond Montreal, we would be making a substantial loss instead of a profit.

Q. When we were paying about \$14 a ton for bituminous coal in Ontario?—A. That is due to abnormal conditions in the United States.

By Mr. Douglas (Cape Breton):

Q. That was paid in Halifax too.

By the Chairman:

Q. Would it not be to the advantage of your company to consider the Ontario market in this light, that if you can get into that market in normal times with normal profits, you will then be able to compete with the American market? The Ontario people, I presume, are not prepared to change their source of supply according to the price? They must have a stable source of supply?—A. Yes, but the trouble with that market is the fact that they want their coal in the winter time when it is impossible for us to get the coal into Ontario, except at the Lakes where Mr. Keefer's country is located.

By Mr. Keefer:

Q. Let us see what this Ontario market is. In the first place, how much coal have you got, after you supply your local companies and interrelated companies and Newfoundland demands?—A. This year?

Q. Take the year 1920 as an example. You cannot supply the demand? It is not a question of transportation?

Mr. Ross: They can increase their supply.

By Mr. Keefer:

Q. Let us ascertain the facts. How much coal have you got to sell after deducting all you have got to supply to your related companies, the miners, and Newfoundland?

Mr. DOUGLAS (Cape Breton): You are asking now about Dominion coal?

Mr. KEEFER: What he represents. We will take up the other afterwards.

WITNESS: We will have this year 2,500,000 tons of coal to sell.

[Mr. Alexander Dick]

By Mr. Keefer:

Q. The Canadian National Railways say they want how much? How much do they want if they can get a proper price?—A. 600,000 tons.

Q. No more than that?—A. They want 1,600,000 odd tons for every purpose.

Q. That is what their requirements are? They will take 600,000 tons from you?—A. Yes.

Q. How much do the C.P.R. require?—A. The C.P.R. are taking nothing from us this year.

Q. How much did they take from you last year?—A. Nothing.

Q. Your statement for the year 1920 shows 4,000 tons.—A. I am speaking of St. Johns.

Q. I am speaking of the railway. Before you get to Ontario I can show you you have not any coal to give us, and unfortunately we want it if we can get it. Take out the Dominion Government railways, the C.P.R. and your local demand, and how much have you left?—A. Do you mean to make provision for the province of Quebec in the usual way?—We would have nothing left for Ontario.

Q. You would have nothing left for Quebec?—A. Oh, yes.

Q. You would have nothing left for Ontario?—A. No, we expect to send 1,500,000 tons to Quebec.

Q. How much does Quebec take of bituminous coal?—A. For the whole province?

Q. Yes, approximately?—A. I should say for the whole province of Quebec approximately 3,000,000 tons.

Q. Naturally, you would hardly expect to carry coal past a market?—A. No.

Q. So that unless you increase your output or do something of that kind, it is useless to talk about getting coal from your properties into Ontario?

Mr. DOUGLAS (Cape Breton): Not at all.

Mr. COWAN: His territory can be developed.

Mr. KEEFER: I say unless he increases his output it is useless to talk about bringing coal from his mines for Ontario.

Mr. COWAN: I understand they would be prepared to further develop their properties, and increase their output.

WITNESS: It depends on whether we can sell all the coal in Quebec this year.

By Mr. Keefer:

Q. You are not going to pass a local market?—A. I am not going to pass the best market.

Q. And when you get up against the competition of the American coal coming in more cheaply than it comes into Québec, that is not your best market?—A. Certainly.

Q. You cannot talk about giving us any coal?—A. Not this year.

Q. And not unless you can increase your output considerably?—A. Our company is aiming at an output of 10,000,000 tons of coal.

Q. That is different?—A. That is my answer to your question. We hope eventually to get into the Ontario market, and my own individual opinion, not speaking for the company but for myself, is that the cost of mining coal in the United States is going to increase very much faster than it has ever done before, because they have exhausted a great deal of their cheaper coal and the conditions are changing.

Q. Your assumption is that the American coal is going to get more expensive. Your statement for the year 1914 shows that you have been supplying the railways with quite a quantity of coal?—A. Yes.

Q. At what price were you supplying that coal in 1914?—A. In 1914 we were supplying that coal to the railways at about \$2.92½ a ton.

Q. All the time?—A. Yes.

Q. F.o.b. Montreal cars?—A. Yes, Montréal.

[Mr. Alexander Dick]

Q. What do you estimate should be deducted from that \$2.92 for transporting that coal to Montreal?—A. At that time?

Q. At that time, and unloading?—A. At that time, we had ships on which we could transport that coal to Montreal at about 50 cents a ton.

Q. So that the freight rate to Montreal was about 50 cents?—A. Yes.

Q. What do you put in for the cost for unloading at the dock?—A. At that time I think our costs were running somewhere about 20 cents.

Q. Anything else?—A. That is in 1914.

Q. You are quite right. Anything else? Insurance, or anything else?—A. I think 20 cents.

Q. So that 70 cents off the \$2.92 would mean you were supplying your coal f.o.b. vessels Sydney at \$2.22?—A. Yes.

Q. To-day your company is asking \$7 f.o.b. vessel?—A. Yes.

Q. Why?—A. Because of the increased costs of coal.

Q. What makes up that increased cost? Is it wages?—A. I am not an expert on costs.

Q. We have a trebled up price. Give us a rough statement.—A. You agreed with Mr. Wolvin he would supply you with that.

Q. He is going to give us the detail.—A. I don't want to give any evidence that will conflict.

Q. Have the wages increased threefold since 1914?—A. I would not be prepared to say that.

Q. Speaking about the wages in the States and so forth?—A. I know in a general way about the wages.

Q. In a general way how much have the wages in Nova Scotia increased since 1914?—A. I am under the impression since 1914 there has been an increase of 127 per cent.

Q. What is the other increase that makes up the difference?—A. There are all sorts of increases. I am not prepared to go into all the details of it.

Q. I don't want you to go into all the details.—A. I don't know as a matter of fact, Mr. Keefer, and I think it would be better if you could get that elsewhere. It would be better for me not to answer that, I think.

Q. Hold on. It is for the committee and the chairman to say how far you should answer?—A. I don't wish you to think I am refusing to answer deliberately.

Q. I only want it in generalities as to the difference between \$2.22 and \$7. In a general way you have given me the wages as 127 per cent. Are you sure for the rest, roughly speaking?—A. There are other increases which I cannot tell you about.

Q. Would it be increases of profits?—A. That is only another way of getting the costs, Mr. Keefer.

Q. I know it is, but I want an answer?—A. Did not the committee agree with Mr. Wolvin yesterday to furnish those?

Q. You can give us some guiding features on the general increases?—A. I don't want to give you any inaccurate figures.

Q. Do you know what prices you charge in selling coal?—A. Yes.

Q. How much were you charging the Canadian Merchant Marine for bunker coal?—A. Last year.

Q. Yes?—A. We charged them, I think, anywhere in the beginning of the season from \$9 up to \$12.25 a ton.

Q. How much were you charging the United States Merchant Marine?—A. Any they got from us \$9 to \$14 a ton.

Q. How much did the Canadian Merchant Marine get their coal for?—A. By going further south I think at that time they paid about \$18 a ton for it.

Q. By going down towards the southern States, could they not get it for \$5—A. Not at that time.

[Mr. Alexander Dick]

Q. Take this year, what are you charging the Canadian Merchant Marine for bunker coal?—A. \$10.25 at the present time.

Q. What is the highest price you have been charging for this year?—A. That is the highest price.

Q. What is the lowest?—A. That is the lowest.

Q. What can they get that coal for elsewhere?—A. I suppose if they could go and get it any less anywhere, they would go and get it.

Q. Have they been doing it?—A. No.

Q. We had it on the floor of the House about some of the boats going south to get cheaper coal?—A. Because they did not want to go to Louisburg on account of the ice.

Q. How much have you been charging at Louisburg?—A. \$9 and \$14.

Q. How much of it was sold at \$9, and how much, roughly speaking, at the higher price, and how much at the lower price, the percentage generally?—A. Those higher prices obtained during the months of July, August, September and October.

Q. I am not finding fault with you. I only want the facts. We know as a matter of fact you can sell your coal right at the highest prices.—A. Before you came in I was dealing with the question of bunker prices, and I was explaining to the committee that the British Government itself had fixed the price of the bunker coal at \$28 in England, and the prices at American points were fluctuating up to \$18 and \$20 a ton for bunker coal during the summer months.

Q. For what year?—A. This last year and I told the committee that we had not put our prices as high as the English had to put theirs.

Q. In 1919 you sold 427,626 tons to Europe, not bunker coal?—A. No.

Q. You bunkered almost the same quantity, 415,000. What was the price of the European coal?—A. I only want to say in connection with that, that that covers the months in which we could not sell coal elsewhere in Canada.

Q. Would you mind telling me the price you sold it at?—A. We sold that coal at that time—I want to be exact. We had contracts for that coal, part of it \$6.50, \$6.75 and \$7, and eventually we got one contract in March 1920 at \$8 a ton, of which we were only able to fill about one-third on account of the embargo being placed in August.

Q. So that of the 427,000 odd tons sold to Europe, it averaged about what price in 1920?—A. About \$6.75 to \$7.

Q. Of the 415,000 bunkered, how much did that average?—A. Well, that I could not give you offhand. I don't know. As a matter of fact I would give you that information if you wanted it later on.

Q. I am not asking absolutely accurately. If you could give it to me in a general way I would be satisfied, in a reasonably approximate way?—A. I want to give you something approximate. I would think that coal would average us somewhere about \$8.

Q. Thank you. You spoke of Brockville and Ottawa being the former deadline beyond which you could not advance on account of the American coal? When was that?—A. 1915.

Q. Of course the war conditions have knocked everything out.—A. Yes.

Q. Do you know whether that would be your deadline now if you attempted to enter the field or not, approximately?—A. I don't know. I would be inclined to think it would be further back towards Montreal.

Q. How did you get that coal to Brockville?—A. By rail.

Q. You did not attempt to bring it by water?—A. No.

Q. All the way from Nova Scotia?—A. We got up to Cornwall by water; some coal in barges to Cornwall.

Q. How did you do? You broke bulk at Montreal?—A. Yes.

Q. And then loaded into an ordinary lake barge?—A. Yes.

Q. Drawing 14 ft. 6.?—A. Yes.

Q. If you could load your large ships with that coal at Nova Scotia and come up to Toronto without breaking bulk it would be a great advantage to you?—A. Yes.

Q. It would reduce your cost of transportation how much?—A. I should think it would make—take in Toronto—

Q. There's where the great market is for Ontario.—A. I should think it would make a difference of perhaps \$1.50 a ton.

Q. Eventually what quantity from that line alone do you suppose you could furnish if the demand was right and the price reasonable, say in Toronto?—A. That would depend on the competition, and I suppose if the market was there for us we could supply Quebec and Ontario with coal after we increased our output?

Q. There is no reason why you should not be able to bring your coal into Ottawa as it used to be brought by barges?—A. We used to send some to Ottawa by rail. I want to tell you what the conditions are to-day so far as meeting competition in these outside points.

The CHAIRMAN: We have only a few minutes before one o'clock. Is it your wish to finish with Mr. Dick before we adjourn, or is it possible to finish with him.

Mr. KEEFER: I should not think it would be possible.

WITNESS: I have been here for two days now I would like to get through.

By Mr. Keefer:

Q. Tell me this: at the present time this duty of 53 cents you were speaking of, to use a slang expression, cuts no ice so far as Ontario is concerned.—A. I would not put it that way, it cuts ice so far as Quebec is concerned.

Q. I am speaking of Ontario first.—A. Taking the present situation to-day it cuts no ice for Nova Scotia coal.

By Mr. Cowan:

Q. Does it affect you in Quebec?—A. It affects us in Quebec, yes.

By Mr. Keefer:

Q. Do you know what the demand for Ontario is?—A. I am told it is a million tons of slack coal. I would not think it would be that much.

Q. I am speaking of bituminous?—A. Does that include anthracite? Does that mean the coal going up by train shipment to Quebec?

Q. It means coming into the province of Ontario?—A. I suppose that is right.

Q. Why in Ontario are we paying 53 cents as duty on coal which is not benefiting Nova Scotia?—A. Of course, you cannot take the duty off in Ontario and not take it off in Quebec.

Q. So far as Ontario is concerned we are paying that duty with no benefit to Nova Scotia and no benefit to the West?—A. If you take that duty off we might be driven out of Montreal.

Q. I would not be a party to doing that if you are going to benefit Ontario or Nova Scotia at all?—A. I am glad to hear that.

The CHAIRMAN: Don't open up a discussion on the fiscal question at present. It is five minutes to one.

By Mr. Keefer:

Q. According to your statement it does cut ice in Quebec?—A. Yes.

Q. Now we have had figures showing you cannot get the American coal down to Montreal anywhere as cheaply even at the high price of \$7, as you can get your coal from Nova Scotia. Take the duty off, the cost of getting the coal to Montreal is greater than the cost of \$7 or \$8.10.—A. That may fluctuate.

[Mr. Alexander Dick.]

Q. You have told us that the American coal is not going to fall. It is going to raise.—A. That would be my expectation, but transportation rates may fall, exchange may fall.

Q. Transportation is not likely to fall; exchange may fall.—A. If you would permit me, there is one matter I want to get on the record. When you are speaking of getting coal into Ontario you are speaking of getting up to Ottawa. You have heard those railway people talking about the rates at which they can carry coal for themselves. I want to make this point: In 1915, we were bringing coal into Montreal and discharging it under much more favourable conditions, and we were paying the Harbour Commissioners 6 cents per ton wharfage on that coal. To-day they are charging us 8 cents per ton. In 1919 we were paying the Harbour Commissioners of Quebec for the rentals for our plants there \$13,500 a year, and last year we paid them \$39,000 for the same property, and this year they are asking us to pay them \$52,200. That is, of course, a matter where that has to be paid. The railroad rate to Ottawa in 1919, Montreal to Ottawa, was 90 cents a ton by rail, and to-day from Montreal to Ottawa it is \$1.25 a ton.

Q. Ottawa used to bring in what was called tide-water coal from the tide-water from New York up the canals in barges. Why can't you do that as formerly?—A. We used to do that, but for coal by rail I am speaking of.

Q. What would be the rate bringing it in by barges?—A. We used to use Mr. Murphy's equipment. He used to buy the coal from us in Montreal and sell it here.

Q. What could you do it for then?—A. I think he estimated his freight at 90 cents.

By Mr. Cowan:

Q. If you are doing a certain amount of that, would not that have the effect of reducing their rates?—A. The cost of operating barges are more now than then.

By Mr. Keefer:

Q. You don't mean to tell us that the water communication from Montreal to here could be more than the rail?—A. No, it should not be.

Q. How much cheaper?—A. I suppose the small barges operating up through the Rideau.

Q. Up the Ottawa I am talking about?—A. I should think it ought to be 50 cents a ton less under existing conditions.

Q. And none of it is being brought that way?—A. No, not now.

Mr. Ross: These are the facts we want to get at. Is the only reason why you don't bring it to Ottawa now as compared with other years the increased freight rate?—A. Yes, we tried to get business here this spring.

By Mr. Cowan:

Q. It means that because the railways are losing business, and the men on the railways are losing their jobs?—A. It means largely those people do not want to buy coal.

The CHAIRMAN: We had better either adjourn or finish up this examination of this witness in a few minutes.

Mr. KEEFER: We will take it at two o'clock. You said you would furnish us with the cost price. Can you give us a statement showing—

The CHAIRMAN: Is it agreed we take ten minutes further now, or shall we adjourn now and meet at two o'clock or adjourn now and meet on Monday?

Mr. DOUGLAS: Yes, or any other day that will suit the committee.

Mr. McKENZIE: I suppose we should give some consideration to the witness. He expected to finish now.

[Mr. Alexander Dick]

By Mr. Keefer:

Q. Which would suit your convenience better?—A. I would rather finish now.

Mr. COWAN: I move we adjourn to meet at two o'clock.

Mr. DOUGLAS: Mr. Dick is the most important witness this committee has. He has put in an awful lot of statements and he has some statements yet that have not been put in.

Mr. KEEFER: I think it would be better to adjourn this matter to meet Mr. Dick's convenience till some day next week, and then take it up.

WITNESS: Very well, that would be all right. Would you allow me to make a suggestion to the committee. I don't know whether any of you are familiar with the final report made by Mr. Magrath. This report contains a very great deal of valuable information along the lines of your examination, Mr. Keefer, and it is the only copy I have got.

The CHAIRMAN: We have already a programme prepared for almost every day next week.

Mr. COWAN: Well, on whatever day you suggest.

The CHAIRMAN: There is no programme for Monday.

By Mr. Cowan:

Q. Would Monday suit you, Mr. Dick?—A. I think so.

The CHAIRMAN: Will Monday suit the committee?

The MEMBERS: Yes.

By the Chairman:

Q. Then we will ask you to return on Monday, at 10.30 in the morning, Mr. Dick?—A. Very well.

The witness retired.

The CHAIRMAN: Gentlemen, before we adjourn, I desire to read a telegram which I have received from Mr. R. C. Vaughan, and which I think should be incorporated in the evidence immediately:—

"Have just printed copy my evidence, find number minor errors but on page fifty-seven serious error paragraph three states I said to the Dominion Coal Company, they ought to sell us coal at profit of one dollar to one dollar fifty cents per ton; that is incorrect, what I did say is that they should not expect a profit of one dollar or one dollar fifty cents per ton, and later on, on same page it is stated that I said United States Companies work on a margin of from fifteen to twenty-five per cent. My evidence said from fifteen to twenty-five cents per ton, which is a decided difference. Would be obliged if you kindly have my evidence corrected accordingly.

(Sgd.) R. C. VAUGHAN."

The committee adjourned until Monday, April 23, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

MONDAY, April 25, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele presiding.

Mr. ALEXANDER DICK recalled.

By the Chairman:

Q. I would like to ask you as a preliminary to your examination to-day a few general questions which I think it would be valuable to have in our evidence. What amount of coal is at present available at the mines?—A. For shipment.

Q. Yes.—A. 170,000 tons in the storage plant.

Q. Have you any information which you can give us as to the probable amount in the dealers' hands in the district in which you handle the coal, that is, is there a large amount in the dealers' hands, or is there a small amount?—A. The dealers in the Maritime Provinces as a rule take the coal from our yards or vessels as they require it, both Halifax and St. John. We used to store the coal for them with few exceptions. Some of them who have wharves in Halifax fill their ships with coal but the ships do not hold large quantities and they use most of their storage places for anthracite coal, depending on us to take the coal from time to time as it arrives. Halifax is only twenty-four hours by water from Sydney, where we keep the steamers moving almost continuously between Sydney and Halifax or Louisburg and Halifax in the winter.

Q. My general idea, perhaps if I explain it to you, we will get at the point more rapidly. The general idea is to ascertain about what amount of coal is available in the district in which you are handling the coal.—A. That includes the supply of coal we cut off by say your mines shutting down.—A. Well, I would say as a rule they have at least from two weeks' to a month's coal supply ahead. I could not give you the quantity.

Q. As compared with other years and in view of the mild winter do you think there is a larger supply than usual?—A. Yes, I think there is. We had at St. John last week about 15,000 tons of coal in barges in the harbour and on the wharves and different places waiting for steamers to come for bunker supplies of coal because we were anticipating that with the strike in England steamers, going across to the other side, would need more coal than they ordinarily used, to bring them back from England while the strike was on.

Q. What about Montreal and the province of Quebec districts? Have you any knowledge as to the probable reserves of coal held there this spring?—A. They are heavier than they have been in any year since the war began. The railways have large stocks of coal at Montreal. I cannot give you the exact quantities, but I am told that the C.P.R. has at least 150,000 tons stored in the Montreal District. The dealers have coal unsold that they expected to sell this winter, but this being a very much milder winter than usual, they did not dispose of the coal during the winter months.

Q. Industrial plants?—A. Industrial plants. At least they have in all cases more coal than they require and they will probably not want to buy coal to store before August.

Q. That is encouraging. It is up to the sales agent?—A. It is up to us.

[Mr. Alexander Dick.]

Q. The present equipment of the Dominion Coal Company is sufficient to produce how much coal, presuming you are running to full capacity?—A. We can easily handle up to 14,000 tons a day and we did. In 1914, in 1915, we shipped up to 20,000 tons.

Q. That would be for a year about?—A. You can not base it that way for a year, because part of that coal that was shipped in one day was coal that was being taken from the storage piles in order to give steamers prompt despatch. If you mean the average output of the mine—

Q. I would say the possible production?—A. I would say the production to-day would be 14,000 tons at our collieries per day.

Q. That is running to full capacity?—A. That is running to full capacity.

Q. What storage facilities have you for storing the supply of coal?—A. Near Sydney and Glace Bay.

Q. Over the whole district in which you distribute coal?—A. Well, we usually have a capacity for about 250,000 tons. We have not as much capacity now as we had formerly because the trestles where this coal was stored are not in as good condition as they were a few years ago, and require to be renewed in order that they may be strengthened up. We cannot put the engine on them.

Q. The amount you could place in storage for reserve purposes would be about 250,000 tons.—A. Yes.

Q. Now the other day you were asked a question as to the amount of coal supplied to the Canadian railways, and the statement is given and it is found in your evidence. From that statement would you just tell the committee as to the aggregate amount that has been supplied the Canadian railways for each year shown on that statement.—A. This includes both our Springhill and Cape Breton collieries. Would you like them separate or will I give you the total for them?

Q. They are both controlled by the Dominion Coal Company?—A. Yes.

Q. The aggregate of coal?—A. In 1914 we supplied 1,291,706 tons, in 1915, 967,127 tons; in 1916, 613,256; in 1917, 589,212. Is this an exact copy of my statement that I put in the other day?

Q. This is the statement you put in.—A. This is a copy of the statement. I am reading from this statement then. In 1918, 490,990 tons; 1919, 415,859 tons; in 1920, 381,303 tons.

Q. Now, Mr. Dick, the surprising feature to me about that is the great reduction in the amount of coal supplied to the Canadian railways. You probably have an explanation of that. Can you give us that explanation?—A. In the beginning of 1916 and 1917 and ending in 1919, at the end of 1919, the principal reason for the decrease was the fact that the steamers formerly employed by the company, the Dominion Coal Company in transporting coal from Cape Breton to Montreal during the summer months had been commandeered by the British Government for war purposes, whereas in 1914 we sold the Canadian Pacific Railway, 534,441 tons of coal for delivery at Quebec and Montreal. In 1918 we did not sell them any coal at Quebec and Montreal. They were getting their coal supplies from the United States.

Q. That would explain the percentage of the decrease.—A. The same would apply in a general way to the Grand Trunk; it took coal from us. The Grand Trunk took coal from us in 1918; delivered at Montreal, but the Canadian Pacific said our freights at Montreal at that time were too high and they could buy their coal elsewhere at a lower price.

By Mr. Ross:

Q. When were your ships commandeered?—A. I think it was about the beginning of 1916.

Q. There is a great falling off from 1914. In 1914 you sold the railroads 1,290,000 odd thousand tons of coal?—A. Yes.

Q. The next year it goes down to 900,000 tons?—A. Yes.

[Mr. Alexander Dick.]

Q. The next year down to 600,000 tons?—A. If you recall in 1914 when the war broke out, there was a very general slump in business in Canada. The consumption of coal for all purposes decreased in 1914 just after war was declared, and at the early part of 1915 we did not have very much business and business only revived in the coal-consuming industries when the Canadian factories and foundries that had been closed down in the early part of the war resumed operations to make war munitions for Great Britain. If you remember the Munition Board in Canada was not established until after they discovered that the most serious difficulty they had at the Front was the shortage of munitions and even then they did not give much business to Canada until 1915 or 1916.

By Mr. Cowan:

Q. Yes, but Mr. Dick, while business may have been depressed at that time, the railways of Canada were as busy as ever, particularly on government work and then they needed as much coal as ever, and yet your supply of coal has considerably dropped during that period.—A. I think you will find coal for the Canadian railways fell off considerably at the end of 1914 and the beginning of 1915, and that they carried over considerable stocks from 1914 into 1915.

Q. You said a minute ago that by reason of the fact that they had commandeered your vessels you had lost the Canadian market. Would placing the merchant marine into that service enable you to regain that Montreal market?—A. We now have our own ships back that were specially constructed for the coal trade. These ships are, from about 7,000 tons capacity up to about 10,000 tons capacity.

By Mr Chisholm:

Q. That is your own ships?—A. They are special colliers made for carrying coal, with the engines aft, large holds, four or five or six, extending to the bow of the ships and these ships of ours have no 'tween decks. The coal goes into them very freely, and they are practically known as self trimmers, although the trimmers have to go in when the ship is unloading and loading. On the other hand the Canadian Government Merchant Marine ships are not specially adapted for coal carrying. They were built for freighting purposes. They have the engines amid ships; the hatches are smaller and they have 'tween decks. That is to say these 'tween decks interfere with the loading and discharging of the ships at Montreal, for instance, where we take the coal. With the mechanical grabs they drop into the hatch and fill themselves and come up. These 'tween decks of the Canadian Merchant Marine ships would very seriously interfere with these discharging grabs because they would be constantly in the way and the cost of trimming the coal both loading and discharging would be considerably more than it is in the case of our own ships.

Q. Still if the Canadian Merchant Marine is prepared to go into that district and take their chance on any extra cost, why should you object to them doing it?—A. Because we have our own ships now back, some of which we have bought, others we have under charter and we would naturally prefer to use the boats. We can do business more expeditiously and more cheaply.

By Mr Chisholm:

Q. You have those under a long term charter?—A. If we want to use them.

By Mr. Cowan:

Q. Has not the Canadian National and any other purchaser the right to come to your piers and transport it as they see fit?—A. If we allowed everybody to come to our coal piers and take coal in large quantities it would mean a congestion of the shipping at the pier, delay in loading the boats, more expense for trimming, more expense for discharging and more expense if the boats did not turn around and come back and be in Sydney and Louisburg when they were required. Some of our

[Mr. Alexander Dick.]

collieries would have to shut down until such time as shipping arrived at the piers to keep our operations going. What we try to do is to run our collieries and our ships just the same as the railroad is running. We run those ships practically on a schedule. We have them loading in Sydney in one day. They take three or four days to go to Montreal. They discharge them in one day and send them back immediately and in that way we keep a continuous line of steamers going between Cape Breton and Montreal so that there is no delay in loading and discharging the boats.

By the Chairman:

Q. We quite understand it would probably meet the convenience of the company to carry on that plan, but why should the Canadian National Railways, for instance, be precluded from buying coal from you at Sydney just because you want to use your own boats.—A. We are not precluding them from buying the coal.

Q. Practically so, by increasing the price.

By Mr. Cowan:

Q. In effect you do preclude them?—A. What would happen to us if we put the Canadian National boats into this service, our own boats would be idle or we would have to re-charter them at a probable loss. Therefore if the Canadian Merchant Marine must carry this coal in its own boats we should be reimbursed for any loss we make on those boats.

By Mr. Ross:

Q. That is just one of the apparent weaknesses of your system. You wish not only a profit on the coal as produced, but you also wish to distribute that coal so as to bring profit to you on your shipping equipment, so to speak. Now, the consumer of the coal is not interested in that. If he prefers to have his coal delivered by some other method, why should he not have that privilege?—A. We don't deny him that privilege.

Q. You penalize him 50 cents a ton?—A. We say it is necessary for us to keep our collieries in operation continuously to provide steady work for our men and to get the very lowest cost of production per ton. If we depend on the Canadian Merchant Marine boats to come and take coal from us we might have one or two or half a dozen collieries shut down for two days a week.

By the Chairman:

Q. Could that not be met by arrangement?—A. We watch our boats, we say to the captain, "You leave and go to Montreal to-day and you have to be back on a certain day, weather conditions permitting." We have our traffic department in wireless communication, keeping track of those boats, we know exactly where they are, when they will come back and when they will load. Therefore our collieries are running continuously.

By Mr. Chisholm:

Q. Have you enough shipping to take care of your own output?—A. Yes.

By Mr. Douglas:

Q. I think you gave in evidence the quantity to be shipped up the St. Lawrence was 1,500,000 tons?—A. We had available.

Q. That would include the 600,000 tons the Canadian National are asking for?—A. Yes.

Q. Mr. Vaughan gave evidence as regards the 600,000 tons, 300,000 tons of that they were willing should be shipped in the Dominion Coal Company's boats, and they only decided to ship 300,000 tons in the Canadian Merchant Marine, so that as far as interfering with the company's business it would approximately be only 20 per cent of the available coal, so I don't think it would interfere in any way with the coal com-

[Mr. Alexander Dick.]

pany's business.—A. It is not so much that; it is the way in which these boats would arrive at our loading piers.

By Mr. Cowan:

Q. Would it not be possible to make a satisfactory arrangement from that? That seems to me to be a minor point. Surely you are capable of making the necessary arrangements.—A. We made an effort to arrive at a satisfactory arrangement with the Canadian National Railroad to work this out in a practicable way. When Mr. Vaughan first made his proposal to me for coal for the railway, he mentioned that they might possibly want to move some of this coal in their own boats, and I said that that would lead to complications in the loading of the boats, because one of his boats might arrive at Sydney at the same time as one of our boats, or a few minutes ahead of it, and get into the dock, and the result would be that one of our boats might have to wait a day in order to be loaded, or the same thing might occur the other way, or he might have three or four boats arriving at the same time, as happened last year, with the Canadian Merchant Marine operating their own boats, and that would cause demurrage to him, involving heavy expense, to the railroad, and great inconvenience to us. I suggested that instead of putting their boats into service themselves that we would charter the six boats he claimed he had which he must use in that service, at the current rate of charter hire at that time, and then we would endeavour to use these boats in the Dominion Coal Company's coal distribution, and to work out a plan whereby we would use these boats of Mr. Vaughan in the distribution of coal in Newfoundland, or Halifax, or St. John, or wherever it suited us.

Q. Could you charge him the fifty cents a ton higher?—A. No, we charged him— or we would have charged him a delivered price at Lévis—the price which we have named for the delivery of this coal. Mr. Vaughan said to me that the plan seemed to him to be quite fair, but he was unable to decide about it until he returned to Toronto. On his return to Toronto, he wrote me that they had decided to operate and control their own boats, and therefore, wished us to give him a price delivered f.o.b. the steamers at Sydney, and they declined to charter the boats to us.

Q. Are your pier accommodations at Sydney so limited, or your loading equipment so limited that you cannot handle both at once?—A. There are only berths for the loading of one large steamer at a time with coal; there are berths for loading schooners and smaller steamers, and boats taking bunker coal. We usually load one large steamer each day at Sydney.

By the Chairman:

Q. Mr. Dick, what I would like to reconcile are these two conditions: First, that you discourage the shipment of coal through the St. Lawrence route except by your own boats?—A. We prefer to ship by our own boats.

Q. You discourage shipment except in your own boats?—A. Yes.

Q. Yes, but taking into consideration the additional fact that your supply of coal to the Canadian railways, excluding the C.P.R. trade, has fallen off over 350,000 tons in the last six years: Now, a superficial observer might say there is some connection between these two. Possibly you have an explanation and it is for that explanation that I ask this question, in order that we may satisfy ourselves.—A. I do not know as I clearly follow the question. Would you let me have it again?

Q. You practically admit that you discourage the shipment of coal through the St. Lawrence ports by other than your own ships?—A. Yes.

Q. And in the last six years you find that the supply of coal to the Canadian railways by your company has fallen off more than 350,000 tons, excluding the C.P.R. entirely. Now, what effect on the reduction has your policy regarding the shipment of coal to St. Lawrence ports?—A. None whatever.

[Mr. Alexander Dick.]

Q. Why?—A. The falling off in shipments to the railways has never been a matter of dispute so far as the putting of coal into their boats or our boats is concerned until now.

Q. This is the first year?—A. This is the first year that the question has ever arisen. In the summer of 1918, we had a pile of coal at Glace Bay, which there was reason to believe we might lose through some fires having developed in the coal pile. We tried in every possible way to get assistance from the Shipping Board—that is the British Shipping Board—to give us steamers to move that coal to Montreal. At that time they had a boat which they had requisitioned from us, called the "Daghild." We had that boat under charter at the time the war began at, I think, about 4/- a ton, which would mean that we could transport coal on the steamer to Montreal at under 60 cents a ton freight.

By Mr. Douglas:

Q. Would that be 4/- per month?—A. Deadweight. Per month, yes. They took that boat from us, and when we asked them to give us a boat for emergency purposes to move the coal to Montreal, after a great deal of negotiations with Mr. Harris, now Sir Arthur Harris, head of the Shipping Board in Montreal, he agreed as a great favour to us to have the boat stopped at Sydney on her way back from France up the St. Lawrence, to take the coal, and took the coal at a rate of \$3.50 per ton to Montreal.

By Mr. Cowan:

Q. \$3.50 per ton from Sydney to Montreal?—A. Yes.

Q. Is that much higher than usual?—A. That is about the highest rate ever paid for taking coal from Sydney to Montreal, but these boats were taken from us. We now have the "Daghild" back on our hands. After being in the war service she came back on our hands under charter, but they took the boat from us. If they had let us alone with that boat we could have freighted that coal to Montreal for 60 cents, and when we wanted him to stop the boat and bring the coal to Montreal, he charged us \$3.50 per ton for the service.

By Mr. Douglas:

Q. What is the charter rate of the "Daghild" now?—A. That I cannot say. It has been considerably increased. I think it is between 8/- and 9/-.

By Mr. Cowan:

Q. What did you say the regular price of water transportation is between Sydney and Montreal?—A. I did not give that estimate. Mr. Wolvin gave an estimate of \$1.25 to \$1.50 per ton.

Q. \$1.25 to \$1.50?—A. Yes.

By Mr. Douglas:

Q. That was not including discharging?—A. I do not know. I have not seen his evidence. I do not think it included discharging.

By the Chairman:

Q. I was going to take you back to a question which you were asked on Friday. The Chairman asked you this question:—"What determines the price at which you sell coal?", and your answer was "—We fix the best price we can get in competition with the other man who is selling his coal," which you confirmed at a later period of your examination when you were asked by the Chairman: "You say you sell the coal at the best price you can get in competition with other coal operators?", and your answer was: "Yes." Now, that does not offer very much encouragement to the Ontario consumer. The Ontario consumer, whether domestic, or industrial, or the railways, are now buying their coal from the United States mines. They have their connections

[Mr. Alexander Dick.]

formed there. Now, unless you are willing and able to sell coal at a somewhat lower price than they can buy from the United States dealers, there is no encouragement whatever for Ontario to look to Nova Scotia for their supply of coal.—A. Would not the Ontario man be willing to give the Canadian producer as good a price as he would pay the American producer?

Q. Is that your experience?—A. My experience is that he usually wants to get his coal from us at the lowest price.

By Mr. Cowan:

Q. At a lower price than the American?—A. Yes.

Mr. CHISHOLM: That is not very patriotic.

WITNESS: You are criticising my methods for trying to get as good a price as I can, but you are not criticising the other fellows for trying to pay as little as he can.

By the Chairman:

Q. The American coal is now controlling the Ontario market. Are you not trying to get into the Ontario market? My experience is that if you are to get into the Ontario market, you will have to give the Ontario consumer some inducement to take Nova Scotia coal?—A. My experience would confirm what you say. We would have to give him considerable inducement to get him to change his present connection, but I think the interior consumer, in taking that attitude, is on very dangerous ground, because during the emergency period of the war, he was absolutely in the hands of the American coal operators; they charged him whatever price they wished for their coal. The price fixed by President Wilson during the war in the United States did not apply to any coal for export and the reason they got more coal than parts of the United States got during the two years of the war was because the Ontario consumer paid the American operator \$1 to \$1.50 per ton more than the men in New England were paying for their coal, because the price of coal for New England was regulated. Now, if the United States had not been an ally of Great Britain during the great war period, I have reason to believe from visits I made to Washington and New York with Mr. McGrath when he was the Fuel Controller, that you would not have got as much coal as you did get for Ontario, and I think this country owes a great deal to Mr. McGrath for the efforts he made to get coal, and the way he succeeded in getting it at that time.

By the Chairman:

Q. Supposing we grant all that, Mr. Dick, the fact remains that there is a market in Ontario for 10,000,000 tons of bituminous coal. The Dominion Coal Company, is producing coal?—A. Yes.

Q. Should that market not be rather attractive to the Dominion Coal Company?—A. Well, with the Pennsylvania coal fields as closely situated as they are to the Ontario consumers, and with the cut-throat competition now going on in the United States between the different coal producing States, the Ontario market is not at all attractive to the Nova Scotia coal operators.

Q. Speaking of the present time?—A. Yes, speaking of the present time.

By Mr. Douglas:

Q. Would you not say rather that it is not as attractive as the Montreal market?—A. Yes. It is as attractive as the Montreal market. It is not in any sense attractive to us at the present time, because I think the coal problem of Ontario has been solved by the present low prices of American coal in the United States.

By the Chairman:

Q. That is probably only temporary?—A. It may or may not be temporary.

[Mr. Alexander Dick.]

By Mr. Ross:

Q. We are paying in Middlesex county \$17, for anthracite coal, and it seems to me that somebody is robbing somebody some place?—A. There are eight large coal producing companies operating in the anthracite coal fields in the United States. The production of coal in that field is 90,000,000 tons per year. They have a market for all they can mine and produce. The cost of production is increasing every year.

Q. You said it was very low a moment ago.—A. I was speaking of bituminous coal. You introduced the subject of anthracite coal. The cost of—

Q. Why should the cost of production differ in these two coals? If labour is cheaper in one, it should be cheaper in the other?—A. The methods of mining and the conditions under which the coal is mined are very dissimilar. In the anthracite coal field the coal is mixed with what is known as bone, and other impurities, which have to be picked out of the coal, and they have a loss—a very considerable loss—between what they pay the miners for a ton of coal and what they pick out and dispose of as waste after it comes to the surface. That is one of the chief factors in the cost of mining anthracite coal.

Q. Let us take that for granted. I think the cost of mining soft coal used in the county of Middlesex is relatively as high as the cost of mining anthracite.—A. What is it there?

Q. I cannot say, but I imagine it is around \$12 or \$13 a ton.—A. It should not be that.

Q. It may not be that, but whatever it is we are paying \$16 a ton for it.—A. What should the cost of bituminous coal up in Middlesex be \$16 a ton, when you can buy all you want in Montreal at \$8.50?

By Mr. Douglas:

Q. That brings up the question why should coal be \$13.50 in Halifax when it is nearer the mines than it is in Montreal?—A. There is not coal at \$13.50 in Halifax in the ordinary sense of the term.

Q. That is what the newspapers advertise?—A. That is not correct.

By the Chairman:

Q. Before we get away from this Ontario situation: You know, I am an Ontario man, and I would like to get a little more information on that point. Let me repeat in central Ontario there is a market for 10,000,000 tons of bituminous coal, which market is tending to increase as the years go along. That market has been held by the United States coal operators, the Dominion Coal Co. is looking for new markets. What should they not be very anxious and make every effort to get into that 10,000,000 ton market in Ontario?—A. Well, they are anxious—

Q. You spoke a moment ago of the Ontario people not buying their coal from you, and you thought it should be only patriotic for them to do it. You, as a business man, know that people do not do business on a patriotic plan entirely. I think the Ontario people would gladly buy their coal from the Nova Scotia mines, at the same price, relatively speaking, as they secured their United States coal. I think they would be only too glad to do that. We know nothing of Nova Scotia coal; no general effort has been made to make our people acquainted with Nova Scotia coal. Your statement the other day that you sold coal according to the price asked by your competitors does not encourage us to look forward to buying Nova Scotia coal. Let me ask you a question—A. I would be glad to think it would not encourage them if they can get American coal at a very low price.

By Mr. Douglas:

Q. What price do they get the American soft coal for in Toronto?—A. I am not prepared to say what the price is, because I am not familiar with local prices in Toronto, but basing on the prices they charge in Montreal for coal, I would say that

[Mr. Alexander Dick.]

hey ought to-day to be able to get soft coal in Toronto at between \$7 and \$7.50 per ton.

By Mr. Cowan:

Q. So there is very little difference in the price in Toronto and the price you are asking for coal at the piers?—A. Very little more.

By the Chairman:

Q. As you admit, Mr. Dick, the price of bituminous coal to-day is abnormally low?—A. In the United States.

Q. Yes.—A. Yes.

By Mr. Cowan:

Q. And abnormally high elsewhere?—A. No, I do not admit it is abnormally high.

By Mr. Douglas (Cape Breton):

Q. That is, in comparison?—A. I would not say it is. I undertook to explain to Dr. Cowan that we had not at any time taken advantage of the highest peak of the market to put our coal prices at any price approaching what the Americans did during the last three years.

By Mr. Cowan:

Q. Precisely, but if you are going to charge up past losses to present conditions, you will lose your business?—A. We are not doing that.

Q. What is the meaning of your words then?—A. We did not say we made past losses in connection with this.

Q. You did not mean past profits?—A. Mr. Wolvin gave you a statement that the cost of producing the coal in Cape Breton was \$7.31 per ton. That is possible in a month where we did not work full time. It was one of the worst months we have ever had for some years, and if it cost that to produce an article you are not making much profit when you sell it for \$7 or 31 cents below the cost of production.

Q. Have you found out by actual experience that the people of Ontario insist upon a lower price for your coal than the American, or why is it that they do not want to buy your coal?—A. I will give you an instance that occurred on Saturday. Since I was here on Friday we were negotiating with the Canadian Colored Cotton Mills for the coal supply at Cornwall, Ontario, which, as you know, is not very far from Montreal, on the canal. We quoted them a price at Montreal plus the barge charges to Cornwall, and they wrote in reply that they were not interested in the quotation, as they could get an ample supply of American coal at a lower price. Now, my recollection is that the price of our coal delivered at Cornwall would be somewhere about \$9, and if they can get coal at \$9 a ton at Cornwall, we think they are not doing so badly.

By the Chairman:

Q. I will admit that this is not a very opportune time to try to get into the Ontario market on account of the low price of bituminous coal. Six months ago when we were paying around \$14 a ton—A. At that time we did not have the coal.

By Mr. Douglas (Cape Breton):

Q. I disagree with you, Mr. Chairman. I think that now is the time, for the reason that we have a very favourable rate of exchange as far as coal is concerned, and for the additional reason that the freight rate between the mines in the States to points in Canada is almost \$3 higher than it was in 1912, whereas the freight rate between Sydney and Montreal has remained practically constant—A. No.

[Mr. Alexander Dick.]

Q. Taking Mr. Wolvin's statement of \$1.25 to \$1.50 for water coal, the freight rates have gone up on American coal as follows: In 1912—this is rail freight—it was 83 cents.—A. That is to the lake front.

Q. Yes. In 1913, it was about the same, in 1914 it was 80 cents, in 1916 it was 83 cents, in 1917 it was 95 cents and in 1920 it was \$1.91½, so that the freight rate to the lakes has gone up \$1.08½. Then the water freights have gone up to Montreal from \$1.10 to \$2.70 so that there has been—A. \$2.25 this year.

Q. I am quoting now from the statement put in by Mr. Vaughan of the Canadian National Railway. He gives \$2.70 to Montreal, which included discharging; perhaps that may account for it. So that there is an advantage now in comparing coal from Nova Scotia as against coal from the States of approximately \$2, apart from the 80 cents, or 70 cents, that we have as the rate of exchange.—A. Yes, but in the same measure the freights—if we undertake to freight coal from Montreal by rail into Ontario there would be an increased rail rate to meet. You must remember that the cost, for instance, of taking our coal over our own railroad from the mines to the piers has increased from 20 cents to 60 cents.

By Mr. Cowan:

Q. In what period of time?—A. The same period that Mr. Douglas is speaking of,—the war period. Then you take the coal to Montreal by water at 50 cents per ton to \$1.50 per ton, and there you have an increase of 300 per cent, is it not? At that rate?

By Mr. Douglas (Cape Breton):

Q. Yes. Well, now starting at Sydney, Mr. Wolvin the other day, I think, let the cat out of the bag when he said that the cost of coal is \$3.40?—A. No, I think you are mistaken about that.

Q. That is the way I interpreted his evidence.—A. I am not responsible for what Mr. Wolvin says, but I know that the cost of coal was considerably more than \$3.40.

By Mr. Cowan:

Q. Have you any objection to telling us just what it does cost to produce coal?—A. We are back to the old point. You have an agreement to get these costs accurately and certified by an auditor. It is a good deal like a man to whom I was speaking the other day, as he was digging holes for posts. I asked him if he was digging out the post holes, and he said: "No, sir, I am not; I am digging out the mud and leaving the holes." We are working backwards and not frontwards.

By Mr. Douglas (Cape Breton):

Q. We will start on the principle that Mr. Wolvin's evidence was correct; that \$3.40 represented the cost of coal. That went on to the rails, so that the rail haul in Sydney was included, which practically made the cost \$3.40 at the pier—A. When was that, Mr. Douglas? About when?

Q. He gave his evidence the other day before the Committee?—A. I did not follow that, but I cannot admit that Mr. Wolvin said the cost was \$3.40. I know it is more than \$3.40, and I think you misapprehended, because Mr. Wolvin was probably speaking, or intending to speak of the slack coal which is used at the Steel Company. You see, most of the coal used by the Steel Company is slack coal. If it is not slack coal and they get run-of-mine coal, they have to press it in order to put it into the coking ovens to manufacture coke, as you know slack coal is always coarser at a very much lower price than other coal in normal times.

Q. Well, taking it as \$3.40: I think Mr. Wolvin was speaking of run-of-mine at the time. We could make that clear later. But taking \$3.40, and then adding the freight rate of \$1.25 or \$1.50 to Montreal—now take Ottawa for example. In 1915 the Nova Scotia Co. sold coal to Ottawa. They delivered coal in Montreal at \$2.92 per ton—A. That was to the railways?

[Mr. Alexander Dick.]

Q. Yes.—A. Would you allow me to explain this question of selling coal to the railways in Montreal, and how that has been done in the past? The railways always contended that the coal we sold at Montreal had to be hauled considerable distances westward into Ontario, but the coal we sold them in Montreal, Mr. Chairman, is coal that they told us—we do not know what they did with the coal, but they told us in some instances they were hauling this coal as far west as Chapleau, and in the case of the Grand Trunk, they said they were hauling large quantities of our coal as far west as Brockville, for consumption in Ontario between Montreal and these points. The C.P.R. sent considerable quantities of their coal to Ottawa and Winnipeg. When they made their contracts for coal at Montreal it was a condition of the contract that they should provide cars promptly to take the delivery of the coal as fast as the steamer could discharge it at our discharging plants; and none of the coal that we shipped to them ever had to go into storage at the discharging plants, because it was promptly put into the cars; the railroad locomotives came and took it away, and they stored it themselves in their yards at Montreal and Hochelaga and various places near the city. Consequently the lowest price at which coal was ever sold at the St. Lawrence to any one was the price named to the railways. That was the keenest competition because the orders were to take those to points where there was the keenest competition with American coal, therefore the price was scaled down to the lowest price f.o.b. cars at Montreal as described.

Q. But it was sold at a profit?—A. It was sold at a profit.

Q. And it was a long ton?—A. It was a long ton.

Q. Now, when coal was being sold to the railroads at \$2.92½, the average price of coal on the dock in Montreal where it has to be taken out of the steamers, put into piles, and re-loaded, and kept for the convenience of customers, the average prices of coal would be between \$3.75 and \$4 a ton, so that it is not a fair comparison to take the railroad price at Montreal of \$2.92½ as the average price of coal, because that is the minimum price at which we were selling coal at that time.

Q. But is it fair, as regards the railways, to take the price at \$2.92½?—A. So far as the railroads are concerned, I have seen the whole question of whether they would buy an extra 100,000 tons of coal from us turn on the point of whether we would make a concession of 2½ cents a ton to meet American competition further West. As a matter of fact those contracts which they are pointing to now at 2.92½ were contracts on which I had spent a month trying to get \$2.95 for the coal.

By Mr. Cowan:

Q. Would it not be a profitable thing for your company to take those railway contracts at almost cost in order to keep your mines running, and thereby save the enormous expense on the other coal that you mine, when you get a big contract like that?—A. I would say that we should take, and we have always been willing to take, a lower price from the railroads that take large quantities of coal and take it in a way that is more advantageous to us by giving a quicker despatch to our boats; but when you reach the point where a railroad company is unwilling to allow anything for the depreciation of your colliery, the depletion of your coal areas, or any other charges except the bare cost of mining the coal, and a small profit per ton for putting it on the cars, it is better to conserve your coal supplies, and wait until you can get a fair profit; because a coal mine is not like a farm you cannot fertilize it and get a second crop off it. Once you take your coal out of the mines it is gone, and you must pay for your mine and your capital expenditure by the coal that you extract from that given area of the coalfield.

Q. In dealing with a big contract like that of the Canadian National railways do you try to get the contract on the cost-plus plan, or do you deal with that on a competitive basis—what you think you can extract from them?—A. We deal with them precisely in the same way as they deal with us. They deal with us on the basis of what they can buy other coal for. This is not a question of how we deal; it is a

[Mr. Alexander Dick.]

question of how they deal. I said on Friday that in 1919, when the Nova Scotia coal mines were suffering, and the miners were out of work, and delegations came up here to Ottawa endeavouring to get the Canadian National Railways to purchase coal, we offered the Canadian National Railroad 400,000 tons of coal at \$5 per ton f.o.b. fields at Sydney. After waiting until about the beginning of June they made us a counter proposal, that we should deliver this coal—only part of it, 100,000 tons of it was all that they were prepared to take from us—that we should deliver the coal at \$5.90 a net ton at Quebec, and \$5.40 a ton at Montreal—which clearly showed that they were putting us up against the most severe American competition, because the further West they come the less they were prepared to pay for their coal.

By Mr. Douglas (Cape Breton):

Q. The situation is just reversed now, and you are asking more for coal delivered at Lévis, although it is a shorter distance from Sydney, than for coal delivered at Montreal; but your offer is less, isn't it, made to the railways?—A. Our offer is less at Lévis than at Montreal; at Montreal we discharge the coal.

Q. You are asking more at Lévis than you are at Montreal?—A. No, we are not, as a matter of fact.

Q. I think it has been given in evidence that the price was \$8.10 that you wanted for supplying the Canadian National railways at Montreal, and \$8.50 at Lévis?—A. No, \$8 at Lévis.

By the Chairman:

Q. In 1919, under the Federal Trade Commission of the United States, an investigation was made of the different coal districts there, and the report which they made on the Illinois district, which was producing 78,000,000 net tons from three hundred mines, showed that the margins between the f.o.b. mine costs and the realization costs of that 78,000,000 tons varied from 40 cents to 51 cents per ton; now I would like to ask you—it is a pointed question—if the Dominion Coal Company would be satisfied with a margin of that amount?—A. I don't think that margin would be sufficient for us under our present system of operation. The Illinois mining conditions are altogether dissimilar from those which obtain in Nova Scotia.

Q. But that does not affect the margin, the costs?—A. No, but what affects the cost is that I would say you could equip one of those mines in Illinois producing coal with a capital expenditure of probably \$200,000, whereas for a similar operation in Nova Scotia, to produce 1,000 tons of coal a day, you would need at least \$1,000,000 capital expenditure.

Q. Could you give us an instance?—A. In some cases, of course, where we are working submarine in Nova Scotia we would have the additional expense that they would not have in the Illinois coal.

Q. But as between the f.o.b. mine cost and the realization cost, out of that margin in Illinois were to be paid dividends, and the balance would go as surplus; now I can understand that the increased dividends on your equipment would call for more margin.—A. Of course, in the first place we would have to go into the whole question of what that mine cost to begin with, and what that area was worth.

Q. That would be the capitalization?—A. That would be part of the capitalization; then there would be the cost of your equipment; then there would be the quantity of available coal, and what should be written off for depletion.

Q. That is, to cover any costs?—A. But as against that, Mr. Chairman, the Illinois coal field has not been exploited to anything like the extent of the mines, or so extensively as the mines in Pennsylvania, or even Virginia, which is a comparatively new field. This field has been opened up more during the war than any other coal field in the United States—the Illinois coal field—and therefore their costs of production and costs of operation, and probably their first costs,—capital costs—are very much lower than any of the others.

[Mr. Alexander Dick.]

Q. But I am speaking only of the margin between the costs and the sales price?

—A. I don't think we should attempt to make a comparison until we have all the facts as to the costs, and so on, of the Illinois field and Cape Breton.

Q. I can understand that as far as the cost of producing coal is concerned, but the margin of profit is what I was endeavouring to bring to your attention?—A. Well, we have at times sold coal at a good deal less than 50 cents a ton profit.

Q. We have probably got all the information we can from you regarding the Ontario situation, but I would like to cover that possibly before the wave of patriotism comes over the Ontario people which will cause them to proceed to buy the Nova Scotia coal for patriotic purposes; perhaps a wave of patriotism will come over the Dominion Coal Company which will cause them to seek the Ontario market and sell coal there for patriotic purposes; I didn't anticipate that either wave will be very strong, for people do not do business in that way?—A. We have endeavoured to get into the Ontario market.

Q. Have you charge of distribution of coal in Nova Scotia?—A. Yes, that comes under my supervision.

Q. Does the principle which determines your price apply to Nova Scotia—coal that is consumed there?—A. Not so generally.

By Mr. Douglas (Cape Breton):

Q. What is the principle there now in the fixing of price?—A. We sold our coal in Nova Scotia at practically the normal price, to stabilize the price of coal, and sold our coal without adding anything more to it than the increased cost, and what we regarded as a fair return on the capital expenditure of the company.

By the Chairman:

Q. Can you tell us what price Nova Scotia people were paying for their bituminous coal, say last December?—A. The people of Nova Scotia paid the Dominion Coal Company, up to the first of December \$6.25 for run-of-mine coal, and \$6.75 for screened coal.

By Mr. Ross:

Q. You don't mean the householders?—A. That is what the householders use—the screened coal. There were other companies at that time selling coal in Nova Scotia and easily disposing of it, between \$10 and \$11 a ton. We did not increase our price.

By Mr. Douglas:

Q. That would be the Acadia, wouldn't it?—A. The Acadia was one, and the Inverness also increased their price.

By the Chairman:

Q. Why were they willing to pay a much higher price to those companies than to you?—A. Because they couldn't get the coal; they had to pay the price; and in the case of the Inverness Coal Company the cost of production was very much higher than any other Nova Scotia coal companies at that time.

Q. Can you tell us what the consumer would be paying?—A. Our attitude was this, after consultation with Mr. Carvell as Chairman of the Board; when he was appointed I told him that we would supply all the regular customers of the Dominion Coal Company with coal, and that if he found any cases where the railway companies were unable to get the full and regular supplies of coal, from other companies we would gladly come to his assistance to the extent of our capacity to supply that coal; and we carried out that policy throughout in dealing with the railways.

Q. Did you endeavour to increase your capacity on account of the scarcity?—A. We did everything we possibly could to increase the capacity.

Q. In regard to the distribution of coal in Nova Scotia, have you any transportation difficulties?—A. No, none whatever.

[Mr. Alexander Dick.]

Q. Transportation is a serious matter in Ontario?—A. Yes, I know it is. We have no difficulties in Nova Scotia.

Q. No complaint to make about supply of cars or delay in deliveries?—A. But there is one thing that happened in Nova Scotia during the coal shortage—when those railroad officials come here and talk of the high-handed action of the coal companies it might be as well to say that when coal was very scarce last July and August in Nova Scotia an order was issued to the Canadian National Railways to confiscate coal assigned to private concerns, and they went so far as to take coal that caused the shut-down of the Bathurst Lumber Company in New Brunswick, and after a very vigorous protest, and being appealed to by the Bathurst people, Mr. Carvell issued an order that further confiscation of coal consigned to private parties should cease, and there has not been any of it since.

Q. Was there any Fuel Controller in Nova Scotia?—A. No.

By Mr. Douglas (Cape Breton):

Q. Still, none of the railways took more coal than was called for in the contract that they had with the operator?—A. Yes, they did.

Q. The records show that there was no case where any company over-stepped?—A. In the case of Springhill we only supplied 11,000 tons; the records would show that.

Q. That would be the only instance?—A. I am speaking of that company, and I know we were the people who were supplying coal from Springhill to the Bathurst Lumber Company.

By the Chairman:

Q. Companies in Ontario resorted to the same methods; I suppose that they thought that the railways must be kept in a state of efficiency?

MR. COWAN: If they did not they could not transport the other coal.

WITNESS: At the same time when Mr. Vaughan comes here and tells you that he was paying us \$6 a ton for coal in Nova Scotia the Canadian National Railway was going down into the United States and buying coal at over \$8 a ton from the American coal operators at the mines, on which they were paying exchange, and increased freight rates and other charges. Why should they object to paying the Nova Scotia Coal operators \$6 a ton when they were paying the American operators \$8 a ton?

By the Chairman:

Q. Within what time was that?—A. Within the six months between June and the end of December, 1920.

Q. I understand your mines were running at full capacity at that time, and you had a market for all the coal you were producing?—A. We had.

Q. You were unable to supply the railways at that time?—A. The railway was taking the position that we should give them all the coal they wanted at \$6 a ton, while they were going down to the States and purchasing American coal at the mines at \$8 a ton.

By Mr. Cowan:

Q. When was this?—A. The last half of 1920, between June and December.

By Mr. Douglas:

Q. Still, there was very little purchased that way, I see from Mr. Vaughan's evidence.—A. It would be well to have the figures.

Q. We have them—not the exact figures, but we have a sworn statement in regard to it. It was a very small quantity?—A. You had better get the figures; I think you will find it is considerable.

[Mr. Alexander Dick.]

By the Chairman:

Q. Where would that go?—A. They used it, I think, in Ontario and Quebec.

Q. Of course in those circumstances the cost of the American coal laid down in Ontario and Quebec would have been less than it would for the Nova Scotia coal—A. No, I don't think so, but the question of our Nova Scotia coal does not enter it. That is where they would have to get that coal; that is where they would always have to buy it, in a general way; and that is what they paid for it.

By Mr. Cowan:

Q. Supposing it was decided to put on a half dozen vessels of the Canadian Merchant Marine, which I understand are reasonably fit for coal service—put them on between Sydney and some point in Ontario and open up an entirely new market for you in addition to what you now have, what attitude would your company take to those companies taking coal at Sydney from your barges?—A. We would be very pleased to supply that coal.

Q. It would not interfere with your regular fleet of vessels?—A. No; when we reached the capacity of those vessels for carrying coal we would be very glad to avail ourselves of the Canadian Merchant Marine.

Q. Would that delay your vessels, then, for a day?—A. They would have to take their chances on being loaded.

Q. You would give precedence in all cases to your own vessels, in a case of that kind?—A. We were not allowed to do that. We must load ships in turn on arrival at the piers, under the usual shipping regulations.

Q. I don't know whether it was you or Mr. Wolvin said the other day that it was necessary to have public opinion behind you, otherwise you would not be able to successfully carry on your business; now, it is pretty generally believed that your company is a big monopoly, and that by trying to insist upon all your coal being carried in your own vessels you are a still greater monopoly; what effect is that having on the public mind, say in Ontario? Is that the reason why they are not prepared to buy your coal?—A. I don't think so. You might as well say that because a man is going to do business with the C.P.R., and they want him to send his freight which originates in the North West, when he sends it over the railroad, to also send it over the steamers to England, that they are trying to monopolize the ocean traffic of the world. The same thing applies. If we had a railroad into Montreal, and we could put the coal on the cars at our own railroad because we wanted to send it over our own railroad into Montreal, wouldn't we have a perfect right to use our own railroad for that purpose?

Q. At the present time there is a pretty strong feeling against monopoly?—A. That feeling is wholly unwarranted as far as we are concerned.

Q. That may be, but don't you think it a pretty good idea at the present time to allay that feeling by allowing the Canadian Merchant Marine to carry this coal? Don't you think it would be a good act of policy?—A. I don't anticipate any trouble at all in coming to an amicable and perfectly satisfactory arrangement with the Canadian National Railways; and I apprehend that the reason they came here was not so much to get the coal carried in their steamers as to get a reduction in the price, and to use this committee for that purpose.

Q. No one is going to use this committee, at least not this part of the committee—not even the Dominion Coal Company?—A. I hope not.

Q. We are not going to allow it, either?—A. That is what we think the Canadian National Railways is probably concerned in—the price of coal.

By Mr. Ross:

Q. Still you are penalizing them to the extent of 50 cents a ton?—A. No, not precisely.

[Mr. Alexander Dick.]

Q. How much is it, if they want to carry the coal in their own vessels?—A. The question is what are we going to do with our own boats. They don't care, I suppose, what loss we make on them.

By Mr. Douglas:

Q. When have those boats been chartered?—what I think we should do is to have a list of the dates of the charters, and where they were chartered—the Dominion Coal Company's boats; they were probably chartered by subsidiary companies of the Steel Company?—A. They are chartered by their owners.

Q. The dates are important, because everybody knows that ships are cheaper in the marine world, especially rates are cheaper, than they were prior to 1919.—A. supposing we could carry coal to Levis at 50 cents a ton less than they can carry it in Canadian Merchant Marine boats, isn't it an economic saving to the country for us to do that, because we have a better type of steamer, a steamer especially constructed for that particular work?

Q. But you don't give any advantage to the country if you take the advantages to your company?—A. In order to know the advantages you have to know what it costs to bring the coal up in the Canadian Merchant Marine boats as compared with the price at which we would put the coal at Levis.

By Mr. Ross:

Q. Do you say it costs them 50 cents a ton more?—A. I think with that type of boat it will cost them more money.

By Mr. Cowan:

Q. Is not that their lookout?—A. Well, why don't they accept our proposal, and let us handle the boats ourselves, instead of having them turn around in such a way as to interrupt our operations?

Q. Just take a look at this point; these boats are really owned by the Canadian people; suppose we, as a Parliament, were to sanction the handing over of those boats to your company, we would be immediately accused of handing those boats over to a monopoly, and where on earth would we land? We cannot afford to hand over to a monopoly the boats owned by the country?—A. I see that Lord Shaughnessy is suggesting this morning handing all the railways over to the C.P.R.

Mr. COWAN: Well, he will have a nice time trying to do it.

By Mr. Douglas:

Q. You said that the price of coal was maintained by your company at \$6.75 a ton?—A. Yes, up to the first of December.

Q. I would like to have an explanation as to why the prices in Halifax were \$12, \$12.50, \$13 and \$13.50, and as high, I understand, as \$14 at that time?—A. We never sold any coal to any dealers in Halifax at more than the prices that I have named up to the first of December. We never charge any Halifax dealers more than the prices I have named for their coal. The standard prices of coal were charged to all the Halifax coal dealers.

Q. That would be that price of \$6.25 and \$6.75?—A. Yes, up to the first of December, and after that the price was \$7.25 and \$8.

Q. So that the dealers, then, made the difference?—A. The difference. It cost \$2.20 ton to freight the coal to Halifax from Sydney.

Q. That is, rail freight?—A. Rail freight.

Q. What does it cost the Dominion Coal Company to barge the coal from Louisburg to Halifax?—A. You mean the barging?

Q. Yes?—A. I would say that the actual barging of that coal would cost about \$1.30 a ton.

[Mr. Alexander Dick.]

Q. You have a contract for barging?—A. We chartered the barge at so much a month. There have been times when that barge has spent three weeks in one port down in Nova Scotia, waiting for the wind to shift, or something to happen during bad weather conditions, when it has cost up to \$2.40 a ton, but the average cost would be \$1.30 a ton for barging.

Q. Barging the coal to Halifax?—A. Yes, then that coal has to be discharged out of the barge, put on our wharf, and practically it is re-screened at Halifax before the dealers get it.

Q. The run-of-mine would not be re-screened?—A. No, but we ship this as screened coal. It is screened coal we ship, and you know when you drop it into the barge and take it out and drop it again, there is a very large percentage of slack; so the dealers simply back their carts up to this coal pile, pick out the largest lumps, and leave the residue of slack coal, which we usually dispose of to the tram company at a lower price.

Q. Then if we take \$1.30 for barging, and the price of coal at \$7, the difference between the \$8.30 and whatever the coal sold for in Halifax was a matter for the dealers and not for the company?—A. No; we added on to the price at Halifax the cost of the handling, one part of the handling, and we charged the dealer at Halifax for that coal on the wharf, where he could take it, \$9.25. Now, when the dealer takes the coal from us at \$9.25, I don't know what he is selling at, but if he is selling it at \$14 a ton, there is a difference of \$4.75 to be accounted for, out of which I suppose \$1 a ton would be a fair carriage charge. Somebody is making too much money.

By the Chairman:

Q. Do you sell direct to the retailer?—A. We sell direct to the retailer.

Q. It does not pass through the hands of any agent on the way?—A. We have our regular salaried agents.

By Mr. Douglas (Cape Breton):

Q. So that you say with coal at \$7 in Cape Breton, and with the barging contract that you have, that a fair price in Halifax allowing \$1 on the difference would be under \$10?—A. No, I would not say that.

Q. Approximately \$10.—A. You must give the dealer some profit, and Mr. Magrath when he was Fuel Controller gave a decision that they should be allowed I think \$2.40 a ton for the retailing of coal, to cover what is called overhead charges.

Q. Would that include delivery, \$2.40?—A. No, I think not. My own opinion is that there are too many coal dealers in Halifax; that their business is not efficiently conducted, and that on account of the duplication of delivery methods they have there, that the people of Halifax pay too much for their coal and that the only solution of the Halifax coal problem is for the Dominion Coal Company to itself establish a retail coal yard at Halifax and sell coal direct to those who are prepared to pay for it.

By Mr. Cowan:

Q. Out in our part of the world it is a very common thing for the American business man to sell his goods, not by reducing the price, but by giving an increased profit or commission to the retailer. Do you know whether or not the American coal operators are giving a bigger profit to retailers in Canada for selling their coal than is obtained by handling the Canadian coal.—A. The principle they work on is this, if they can get retailers to boost their goods they will sell them and they can best get it by reducing the profit.

Q. They enlist the sympathy of the retailers to boost their goods?—A. In reply to that my experience would show that the American is selling his coal at a net price to the dealer in Canada, that is, he allows them to fix all their own commissions on his coal. During the past year there has been such a strong demand for coal in

[Mr. Alexander Dick]

Canada, that a great many of our coal dealers and jobbers and wholesalers have gone down personally to the American mines and sat around for weeks trying to buy coal from those American coal operators at a price at which they could sell it at a profit.

Q. Any increased profit is given to the retailer?—A. I am speaking of Halifax. The Halifax retailer does not buy any American coal except anthracite.

By Mr. Douglas (Cape Breton):

Q. Because the price of coal there is not fixed on what has been termed the competitive basis?—A. The same as Montreal. It is fixed on a fair profit on the production of coal down at Sydney, a fair profit from the standpoint of the operating company. That is the situation in regard to Halifax. That would be my impression.

Q. With regard to bunker coal in Halifax, what does it sell for?—A. The price of bunker coal at the present time in Halifax is \$12.50 to \$13 a ton, delivered in lighters alongside the ship, hoisted over the side of the ship, and trimmed into the steamer's bunkers.

Q. What is the price of bunker coal in St. John, N.B.—A. \$13.

Q. What is the price in Sydney?—A. \$10.25,

Q. And at Louisburg?—A. The same.

Q. Are you aware that the Canadian Merchant Marine are bunkering ships in the United States?—A. Mr. Keefer, I think, mentioned that.

Q. Perhaps I better read this statement to you.

"April 19, 1921. The Dominion Coal Company are still asking \$10.25 for bunker coal at Louisburg, while our vessels going south can buy it for \$5 and \$6.50 at Norfolk".

A. Our vessels going south?

The CHAIRMAN: What statement is this?

Mr. DOUGLAS: It is a statement I am reading.

The CHAIRMAN: Whose statement is it?

Mr. DOUGLAS: It is a statement from one of the officials of the Canadian National railroad.

The CHAIRMAN: Had you not better specify what it is?

Mr. DOUGLAS: I will use my own judgment as to that.

The CHAIRMAN: I think probably before any statement goes in the record the name of the author of the statement should be given.

Mr. DOUGLAS: It is in the record now, as far as that goes. I am asking Mr. Dick what he has to say in regard to this statement. I am quoting this statement. The Chairman has made a statement, and I have told him it was from an official of the Canadian National Railways. Now I am asking the witness what he has to say in regard to this statement.

WITNESS: That our boats, the Canadian Merchant Marine, are obliged to go south in order to get bunker coal at \$5.50 and \$6, because they are charged at Louisburg and at Sydney the price of \$10.25 and \$13 at St. John and at Halifax. I would say on the face of it that that statement is intended to convey the impression that the Canadian Government Merchant Marine have to send their boats 500 miles down to Norfolk to get coal, burn that coal and come back and load a cargo in Canada. It is an absurd statement for any body to make, but if it is intended to convey the impression that a boat loading at St. John, going to South America or going to South Africa on a southern course can be deflected 300 or 400 miles in Norfolk to take advantage of the price of \$5.50 which in December last was \$18.50, in November last was \$18.50, then there is not much criticism to be offered because the boat would probably save a few dollars per ton on the price of its coal, but the bunker trade in which we are interested is not with boats going to South Africa and South America; it is Transatlantic bunker trade between Canada and Europe, and we don't propose

[Mr. Alexander Dick.]

because some person down in Norfolk is selling coal without any profit at \$5.50, to furnish coal for all the ocean boats on the Northern route at a loss, which may involve a good deal of money in order that we might gratify the officials of the Canadian National Railway.

By Mr. Cowan:

Q. Do you expect those American Companies to sell their coal at a loss in that way?—A. I don't expect them to do it, but I know they are doing it to-day. It costs them \$2.75 to haul that coal from Virginia down to Norfolk. That leaves them \$2.75 at most. They produced sworn testimony at Washington some time ago that the cost of operating and mining coal in the same district from which they say that coal was being shipped average between \$2.34 and \$2.76 per ton for the cost of producing the coal; therefore there would not be much profit.

Q. What reason would they have to continue this practice of selling coal at a loss?—A. I don't suppose it will continue very long.

Q. Do you think the price in the United States will be below what it is to-day?—A. I think the prices in the United States have touched rock-bottom.

Q. Is their production keeping up?—A. Production is very much lower than it has been during the past three years.

By Mr. Douglas:

Q. How is your bunker price fixed? Is it a competitive rate?—A. Absolutely a competitive rate.

Q. So that when you fixed the price of \$10.25 at Louisburg it is because there is no American coal there that it is made so high?—A. No it is not a high price for bunker coal comparatively. It is only within the past few months, that the shipping business has become depressed. But the shipping people are not making these enormous profits. They made larger profits than anybody else during the war.

Q. The price charged the Canadian Merchant Marine last year was higher than this? It was \$14.25.—A. It was say \$9 and \$12.50. We did not charge them \$14.25. The highest was \$12.25.

Q. Don't you think it is a very serious matter that Canadian ships, in fact any ships are driven away from ports such as Sydney and Louisburg, right in the neighbourhood of the collieries where they leave a certain amount of business and are obliged to go to the United States for bunker coal instead of giving that employment to miners who are digging the coal down in that part of the country?—A. That is not happening. It has never happened. I assume Mr. Vaughan does not tell you in his letter that this boat left Sydney or Louisburg to go South. He does not tell you where she left to go South, but I assume that boat left St. John, N.B., to go south, and that she took a certain quality of coal at St. John, and then she was deflected into Norfolk to get cheaper coal to go south. Probably if you will look into that matter carefully there was another reason for that ship going south, instead of taking more bunker coal at St. John she could carry a larger cargo to Africa because the coal she would otherwise load at St. John would prevent them putting in that much additional cargo, therefore they stopped at Norfolk to replenish their bunkers and proceed on their voyage.

Q. Therefore would it pay them to get their bunker coal at the lower price as against \$13 in St. John and Halifax. That is expected, is it not?—A. Yes.

By Mr. Douglas:

Q. We are here to try and extend that market for Nova Scotia coal. We don't want to put any company into bankruptcy or anything of that kind, but we do want to find the means of doing it. What are your suggestions, say, that can be of value, or what should be done in order to extend that market and get these mines open and

[Mr. Alexander Dick.]

running? To bring it right down to concrete, what can we do, in your opinion?—A. Well, my opinion would be that we should establish a national coal policy in Canada, that Canadian consumers should as far as possible use only Canadian coal.

By Mr. Douglas (Cape Breton):

Q. Would you not go a little bit further and say Canadian coal producers must sell it at a fair and reasonable price and get out more coal?

By Mr. Cowan:

Q. Just let him finish this and we will criticise the policy afterwards.—A. Quite so. I do say we should establish a national coal policy for the whole country, that the Canadian consumer should give the preference to Canadian coal in order that we may develop our own national resources, and be more independent of the United States in a time of emergency. To-day if anything should arise, which is not at all probable, but if anything should arise to cause the mines to shut off coal supplies coming into the province of Ontario you would be in the same position as you were during the war period 1917 and 1918. My idea would be that the only way in which you can overcome that is to encourage exportation of more Nova Scotia coal into Ontario and help us in every way by giving us better and cheaper transportation facilities to allow us then to go into that market, increase our output, to enter that market and do our business in competition with the American coal operator. My own view is that the cost of mining coal in the Pennsylvania coal fields is going to be higher, so that we might possibly gradually force our way up into the province of Ontario as far as Toronto provided we get the proper encouragement in order to carry out that policy.

By Mr. Douglas (Cape Breton):

Q. Could it not be done in this way: Going back again to the figures of 3.40 cost, Mr. Wolvin's figure of \$3.40 cost and the \$1.50 to take the coal to Montreal? That lands the coal in Montreal at, say, \$5. The Grand Trunk, from which company a gentleman gave evidence, say that they carried American coal over the Grand Trunk railway at half a cent a ton.—A. That is for their own use only.

ff Q. Yes. The Canadian National gave evidence that they carried it at $\frac{7}{10}$ of a cent a ton for their own use over their own railways. It is only reasonable to suppose that the same advantages should be given to Canadian coal as is given to American coal in carriage.—A. Quite so.

Q. If you take half a cent a ton after it is landed in Montreal at a cost of \$5, take the distance to Toronto, which is in the neighbourhood of 300 miles, I think, Mr. Chairman.

Mr. Ross: 333 miles.

By Mr. Douglas:

Q. At 333 miles, that would add at half a cent a ton, according to the Grand Trunk rate, \$1.65. So with \$5 and \$1.65 that would give you coal delivered in Toronto as against the price you thought you were not quite sure about—the bituminous coal was landed in Toronto at about \$7.50.—A. I should think that would be about right.

Q. So that in that way we have the Toronto market open to us now, assuming the price Mr. Wolvin has given is correct as to the cost.—A. I know that that cost is considerably higher than \$3.40.

Q. There is another factor. Costs are kept on the long ton, are they not, mining costs?—A. As a rule they are, yes.

Q. The tonnage is on the long or gross ton?—A. How do you mean tonnage? Shipping tonnage. Shipping tonnage is usually chartered by the net ton now.

Q. Net ton, or gross?—A. Net ton.

[Mr. Alexander Dick.]

Q. My experience is that it is always gross.—A. Do you mean now the time chartered tonnage? If you mean the time chartered tonnage, you are right. It is the gross ton time-charter rate per ton.

By Mr. Cowan:

Q. Why have these two tonnages?

By Mr. Douglas (Cape Breton):

Q. Then I think it can be said correctly that the \$5 cost, including the cost of the coal and of transportation, being in gross tons, that would make a cost of roughly, say \$4.60 a net ton.—A. Ten per cent less.

Q. That would make \$4.50.—A. That would make \$4.50.

Q. If those assumptions are correct.—A. Of course your assumption in regard to cost is wrong.

Q. I am not making an assumption. I am making a deduction from Mr. Wolvin's figures that the cost is \$3.40, and that the same arrangement could be made and should be made in regard to carrying Nova Scotia coal over the railways as is made in regard to the carriage of American coal over the railways, that then there is a difference of \$1.50 between the \$7.50 quoted price in Toronto and the price that it can be delivered in Toronto from Nova Scotia. That would be correct.—A. Assuming your base prices are correct, but I don't think I can assume anything like those figures to-day.

Q. That is in regard to the cost of coal?—A. That is in regard to the cost of coal.

Q. If the cost of coal is correct, the other general conclusions would be correct, Mr. Dick.—A. Yes, if your figures in regard to the cost of coal are correct, which I don't admit.

By Mr. Ross:

Q. In regard to the cost, why should this be so? Why should not those figures be correct? You told us just a minute ago that they are producing coal down in Virginia to bunker these ships, and it is costing \$2.75 at the mine.—A. Yes.

Q. Mr. Caye told us they are mining coal in Ohio at \$2.30. Now if they can do that in Ohio at \$2.30 and in Virginia at 2.75, why cannot the Dominion Coal Company do it in Nova Scotia at \$3.40. In the morning papers there is a statement that you are paying the lowest wages to miners of any place in the world.

Mr. COWAN: With one exception, the negroes in Alabama.

WITNESS: You can take it that that is not true.

By Mr. Ross:

Q. Why not produce your coal at \$3.40, with these comparisons in view?

Q. What is the difference between mining coal in Virginia, and mining coal in Ohio?—A. The difference, Mr. Ross, is that in Ohio as a rule they have very shallow shafts, or else they have drifts into the side holes. There is no expense involved for the pumping of the mines. The haulage of the coal out has been done by electricity, and is a very simple operation. They employ a great many less men in connection with their operations; the climatic conditions are altogether different; they have no trouble with snow or kicking ice from the railroad tracks; they, as a rule, have not anything like the same mining regulations or governmental regulations which we have—

By Mr. Chisholm:

Q. In what respect, Mr. Dick?—A. In respect to the number of shot-firers and men of that kind who have to be employed, and men to inspect the mines for gas, and they do not have, as a rule, down in Virginia—the mines are not unionized.

[Mr. Alexander Dick.]

By Mr. Ross:

Q. What about the element of water in the Virginia mines?—A. That is a very serious item.

Mr. CHISHOLM: Yes, I would think so.

WITNESS: Now, here is a resolution. This statement is published in the *Coal Review* of Washington, which is the official organ of the National Coal Association of the United States. They had a meeting in Altoona—the bituminous coal operators of the central coal field in Pennsylvania had a meeting in Altoona last week—

Q. When was that?—A. This paper is dated April 20.

Q. Of this year?—A. Last Wednesday morning. It says: "Last Wednesday morning"—that would be April 20—"a meeting was held at Altoona. There were 115 coal-producing companies represented at the meeting." They go on to say that the production in the district has fallen off, from the week of December 19, 1920, 2,515,000 tons to 1,051,000 tons during the week of April 3, 1921, or a decrease of 58 per cent. Part of this decrease is due to lack of demand, and part of it is due to the inroads made by other districts employing non-union labour in markets formerly supplied by this association. They go on to say then:

"The executive committee of the Operators' Association be authorized to make a wage agreement with the United Mine Workers of District No. 2, and to suggest to them that a joint conference at an early date should be had to discuss with them the grave problems confronting the Central Pennsylvania Coal Field."

These are the people right down south of us who supply a great deal of the coal going into Ontario.

By the Chairman:

Q. Mr. Dick, in speaking of the policies which you would recommend for the Canadian people, may I ask this: Does the Nova Scotia Government receive any royalties on the output?—A. Twelve and a-half cents per ton.

Q. How much?—A. Twelve and a-half cents per ton.

Q. So it will be a very considerable part of their revenue—the revenue from the production of coal?—A. This is the usual royalty.

By Mr. Cowan:

Q. Do the States usually exact royalties on the American side?

By the Chairman:

Q. Excuse me for a moment, Dr. Cowan? Is the Nova Scotia Government taking any steps to popularize this Nova Scotia coal in new markets?—A. Yes, the Nova Scotia Government is always taking a most lively interest in the finding of new markets for coal.

By Mr. Douglas (Cape Breton):

Q. Where have they done that?

The CHAIRMAN: Just a minute, Mr. Douglas.

Mr. DOUGLAS: No, it is just that. I asked "where," so that he might complete his sentence.

The WITNESS: In co-operating with the coal companies to make investigation and placing at our disposal all the information which they have, and all the facilities which they have. Of course, it is a matter of very vital interest to the province.

Q. And naturally in regard to mining?—A. Only last week Premier Murphy called to see me in Montreal, and we had a long conference on the question of

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future coal production and what could be done to increase our coal sales, and at the same time increase the revenue, in which he is very much interested.

By Mr. Cowan:

Q. Perhaps the appointment of this committee has had some effect in Nova Scotia?—A. I think, perhaps, he might have come up anyway, if there had not been any committee appointed, but the appointment of this committee may have had some effect.

By the Chairman:

Q. We have had before the committee, representatives of the Alberta Government and we have been rather impressed by the action the Alberta Government is taking in regard to introducing their coal to Winnipeg and Manitoba. If I might make a suggestion, which you might add to your policy, it would be that the Nova Scotia Government, in co-operation with the Dominion Coal Company, who I understand have a practical monopoly of the production of coal in Nova Scotia, should take similar steps to introduce your coal into Ontario.—A. What have you in mind, Mr. Chairman?

Q. I would suggest that you read the evidence of the Alberta representatives.

By Mr. Cowan:

Q. What they do out there is that they charge the different coal companies 5 cents per ton, which goes into a fund which keeps a trade commissioner, or trade commissioners, in other points, whose duty it is to further the sale of Alberta coal. Would your company be prepared to assist your Government to that extent?—A. We prefer to do our own business without the assistance of any outside party, as I think it is always more satisfactory. The money the Nova Scotia Government gets is usually used by them for educational purposes, and the maintenance of roads, but whether, if we are to make a present of so many cents per ton to Ontario, we can give them cheaper coal or not, I cannot say.

By the Chairman:

Q. I can assure you that the Ontario people are not asking for that. The Alberta Government is acting in the interests of the Alberta coal business. They thought wise to adopt that policy. I am not suggesting that the Nova Scotia Government be asked to contribute anything, but it occurred to me that it might be interested in adopting a similar policy, or possibly you could evolve a better one?—A. The Alberta Government is in this position, as I understand it, Mr. Chairman; that, being pioneers, they are trying to find and work up a market for their coal. The coal industry of Nova Scotia is an old established industry, and we have our own trained people—people supposed to be trained, and experienced in the matter of marketing their coal and of finding markets for it—and we have never gone to the Government in the sense of saying: "Will you help us to find a market?" We go out for ourselves and try to find them. We know where to go, and we think we know what to do when we get there.

Q. But as a means of securing a new market in Ontario,—I know you have not given it consideration, but I am commending this to you for your consideration as a good means of securing the co-operation of the people of Ontario?—A. I quite agree, and welcome any suggestions, Mr. Chairman, to help sell the coal, in any way having it introduced into the Ontario market, and we have left no stone unturned, when we had a surplus of coal, to try to get as far west as we could because it was to our advantage and interest to do so.

[Mr. Alexander Dick.]

By Mr. Douglas (Cape Breton):

Q. But, is it not a fact that the Dominion Coal Company does not really want to get into the Ontario market, and for this reason that, in your own evidence you said the other day that Montreal was your best market, and that was, I presume, because there was more profit in selling coal in Montreal than anywhere else. Now, if it is going to be carried further west than Montreal there will be less profit, of course, and so long as you can sell your coal in Montreal there is no desire to sell it in Ontario?—A. No, that is not correct. What we have a desire to do and what we may be able to do may be entirely different for the moment.

Q. Then, what is a correct statement?—A. I have stated that the policy which we would advocate would be to have a Canadian national policy whereby we would produce coal to the largest possible extent for the Canadian people, and that the Canadian consumers of coal give a preference to the coal produced in Canada. That is what I say.

Q. That is correct.—A. We would co-operate with the consumers of coal for the purpose of producing the largest possible quantity of coal in Nova Scotia for Ontario or any other part of Canada where they would take it from us and pay a price for it.

By Mr. Cowan:

Q. Supposing it was considered desirable for a year or so to make a special effort to get this Ontario market and the Montreal market as well—because you already hold a large part of the Montreal market, while in Ontario they prefer to retain their American connections because they were supplied in a time of need, as Mr. Wolvin said—supposing we could arrange that for a time there would be reduced transportation into Ontario—say for a year or so—would your company be willing to cut out a large part of your profits in order to get a foothold in this market?—A. I cannot say.

Q. Would you consider it a good policy to do so?—A. I would not consider it a good policy to cut out the profits when a large number of shareholders are looking for dividends.

Q. So the dividends are your chief consideration?—A. The dividends are the chief consideration of the shareholders of the Dominion Coal Company. I am not here to say that I am going to sacrifice the dividends of the shareholders for the purpose of getting into additional markets.

By Mr. Douglas:

Q. But, in the meantime production is being held back?—A. No.

Q. It has been for the past three or four months?—A. No.

Q. The mines have been idle and not producing very much coal?—A. The mines have been idle for the same reason that the mines in the United States have been idle, and the mines of the United States have been idle because there is not a demand for coal. The consumers of coal in the United States are not using coal, causing what is known in the coal trade as a "buyer's strike." People are not buying coal because they are holding off expecting to get it at a lower price, and the result of that is that the coal production in the United States has fallen from 11,000,000 tons a week, the former rate, to somewhere in the vicinity of 6,500,000 tons, I think.

By Mr. Cowan:

Q. That looks as if there might be a very substantial shortage again next fall?—A. There is already a shortage as appears from general indications this year, of 35,000,000 tons of coal in the United States.

By Mr. Douglas (Cape Breton):

Q. Was that soft coal?—A. Soft coals, which cannot be made up because you have lost that production. If the present shortage of coal continues in the United States

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at the rate of 4,000,000 tons per week, and we get into the cold weather with the congestion on our railroads, you will have precisely the same condition in 1921 that you had in 1919 and 1920. There will be a great shortage developed in this country; the price of coal will go up; the miners will demand that the present wage scale shall be continued, or they will be asking for an increase in wages, and conditions will be just as bad as they have been in the past, through the failure of the consumers to take the coal when they could get it.

By Mr. Cowan:

Q. With that belief in your mind are we to understand that you are not prepared at the present time to make any contracts, because you think that a little later on you may be able to get more money?—A. No, I am ready to make contracts. We have never been out to get the last cent out of the public.

By Mr. Ross:

Q. Does that also apply to anthracite?—A. No, but the anthracite has fallen off too, and I would advise anybody interested in securing coal, to buy it now for two reasons, first, the anthracite price advances ten cents each month, and secondly, there is a Bill before the State Legislature in Pennsylvania in which they propose placing a tax of $2\frac{1}{2}$ cents on the value per ton of anthracite coal prepared for market, in Pennsylvania. The proposed tax will, they believe, yield them between eleven and twelve million dollars annually on anthracite coal shipped out of that State.

By the Chairman:

Q. So one of the important remedies for the threatened condition is for people to buy their coal now?—A. Buy their coal now.

Q. The public have their responsibilities as well as the coal operators?—A. Yes.

By Mr. Cowan:

Q. Would you be prepared to say what you consider to be a fair profit on a ton of coal mined?

Mr. Ross: You mean the percentage?

By Mr. Cowan:

Q. Yes, what percentage?—A. That question was asked on Friday—

Q. I did not remember it.—A. I said then that I would prefer not to answer it, as that is only another way of getting down to this question of costs, and I would prefer that you get your costs statements and see how much profits are being made, as compared with the selling prices.

By Mr. Ross:

Q. Can you tell us when your company will have the statement ready for us?—A. I do not know. Did you fix any time with Mr. Wolvin about it?

Q. No, I do not think we did.—A. I did not see Mr. Wolvin. He went to New York on Saturday, and I did not see him.

By Mr. Cowan:

Q. Would you consider \$3 a ton profit exorbitant?—A. I should think that would be pretty high.

Q. Would you consider \$2 a ton pretty high?—A. That is high too.

Q. What about \$1—A. We will not talk about \$1.

The CHAIRMAN: Has any one any further questions to ask Mr. Dick?

[Mr. Alexander Dick.]

By Mr. McKenzie:

Q. Have you any idea how much coal is coming into the province of Ontario from the United States—bituminous coal?—A. Well, Mr. Keefer stated here on Friday they were bringing in about 13,000,000 tons of coal a year.

The CHAIRMAN: For the whole of Ontario?

WITNESS: Yes, for the whole of Ontario.

The CHAIRMAN: 10,000,000 tons for Central Ontario.

WITNESS: Yes.

By Mr. McKenzie:

Q. 13,000,000 tons of bituminous coal?—A. Yes, but I would say that a very large percentage of that coal is not consumed in the province of Ontario.

Q. What becomes of it?—A. A large part of the coal that is shipped to Fort William and Port Arthur, at the head of the lakes, is transhipped into Manitoba and Winnipeg and points west. I should say probably over a million or a million and a half tons of coal goes west from Port Arthur.

By the Chairman:

Q. Would you permit me to quote from the figures given by the officer of the Statistical Department?—A. Yes, that would be better.

The CHAIRMAN: In 1920 Central Ontario, which does not include the head of the lakes, 10,373,324 tons; at the head of the lakes, 1,963,579 tons; that is the coal which goes to Winnipeg and the west.

WITNESS: Then there is the coal that comes in by way of Prescott, Mr. Chairman. A large quantity of that coal is sent from Prescott down to Montreal and into Quebec by rail, so it is quite probable that the coal which is cleared through the Custom House entries is actually largely consumed in the other provinces.

Mr. McKENZIE: Perhaps, Mr. Chairman, you could give me, from the figures you have here, an estimate of the American coal that goes to the railways and the quantity that goes into domestic and industrial consumption; are those figures given separately?

The CHAIRMAN: No, there is not a statement.

Mr. McKENZIE: We have no statement of domestic consumption of American coal in Ontario?

The CHAIRMAN: Not in evidence.

Mr. McKENZIE: What do you say yourself, Mr. Chairman, as to the proportion of domestic?

The CHAIRMAN: A very small percentage would be domestic; it is mostly for railways and industrial purposes.

Mr. McKENZIE: I am trying to find out what we have to look after, in Nova Scotia, for the supply of coal in Ontario.

By Mr. McKenzie:

Q. Have you any idea, Mr. Dick, if you were going to provide for the industrial and domestic supply of the province of Ontario, how much coal you would have to furnish?—A. I should think it would be two or three million tons of coal for Ontario for industrial purposes. But I would like to say a word on another point—that we have one very serious source of competition to meet in the province of Ontario, and also in the province of Quebec, that has developed within the past five or six years. The scarcity of coal brought about a great many experimental tests as to using up the old dumps of anthracite dusts and culms that were formally considered waste products

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throughout the Pennsylvania coal fields. This anthracite culm is now taken and re-screened and divided into what is called Buckwheat and Pea coal and dust, and comes even into the Quebec market, right under our noses in the province of Quebec, and is sold there for steam purposes at very low prices in competition with Nova Scotia steam coal.

By Mr. Cowan:

Q. What duty does it pay?—A. It does not pay any duty. Now, originally the tariff was arranged so that the anthracite coal coming into Canada would be admitted free of duty because it was used for household purposes, and bituminous coal coming into Canada in competition with our coal, from Nova Scotia, was taxed. There must be half a million tons of those various sizes, what is known as anthracite steam sizes of coal, coming into the provinces of Quebec and Ontario to-day that does not pay any duty to the Canadian Government, and they come into open competition with the bituminous coal, and it is supplanting bituminous coal in the factories and other places throughout the country. This coal, which is a steam coal, which is a by-product of the anthracite, is a very serious source of competition, especially in the Montreal market, and west in the province of Quebec, and ought to pay the same duty of 53 cents a ton as bituminous coal.

Q. That would go chiefly to the manufacturers?—A. Manufacturers.

Q. It is not used for ordinary domestic purposes at all?—A. I think it is used in some cases, probably, for apartment houses in the city.

Q. For steam boilers?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. So you think there should be protection?—A. I think there should be protection?—A. I think there should be protection on the steam sizes of anthracite coal.

By Mr. Cowan:

Q. The other day you said you had entirely lost the Scandinavian market in competition, as I gathered, from the German mines; what wages are they paying in the German mines, do you know?—A. I could not answer that question off-hand to-day. Conditions have changed so much in the last few years. Of course the Germans did not supply much coal to Scandinavia during the war; they were practically out of that market. We have sent some coal to Scandinavia in the last few years—to Gothenburg and Stockholm—but we never went back to try and get the market and make a systematic effort, as we did in 1903.

By Mr. McKenzie:

Q. Is there a class of barge that could be utilized during the summer season from your coal mines, either at Louisburg or Sydney harbour, to go up the canals to lake Ontario and lake Superior?—A. You could not use barges with safety, except perhaps in the months of July and August, in the gulf of St. Lawrence, for sending coal up on the 14-ft to 16-ft draught canal. The only way would be to bring the coal in large steamers to Montreal, tranship it over the side of the steamer into the barge at Montreal, and send that barge up through the canal,—or small steamers.

Q. I heard somebody say here the other day that vessels carrying 2,000 tons of coal were going through the locks of the canal?—A. That is quite so—the boats of a 14-ft draught are carrying a maximum of about 2,400 tons of coal through the canals, net tons of coal.

By Mr. Cowan:

Q. Cannot they go right down the St. Lawrence to your mines?—A. They can, but they are not well adapted to navigation in the open waters. The lake type of

[Mr. Alexander Dick.]

boat is much slower; on account of the high free-board it is buffeted about more by the winds, and makes longer voyages, and is not as satisfactory as the ocean-going type of boat we use, carrying up to 7,000 tons of coal.

Q. Is there any type of boat that would be satisfactory to take your coal from Sydney right up through the St. Lawrence and through canals, and land it in Ontario? Have you such a boat in existence?—A. Yes, boats carrying up to 2,400 tons, built on a 14-foot to 16-foot draught, can be constructed to carry the coal up but that would not be the cheapest way of getting it up there. It would be better to bring the coal in a larger boat to Montreal, which is the larger distance, then transfer it to a smaller boat and send it up to Toronto in the smaller type of steamer.

Q. That is, what you save in the long haulage from Sydney to Montreal would pay for the transshipping?—A. Yes, and more.

By the Chairman:

Q. What is your idea of not only the possibility but feasibility of getting coal to Lake Ontario ports in that way?—A. Well, it is altogether a question of the cost and the conditions. I do not think that to-day you could work it very well, under the varying conditions.

By Mr. Ross:

Q. Would there be any chance for a return cargo of any kind for such boats?—A. The boats coming down to Montreal would bring coal down from Lake Erie, and the boats going up would be taking Nova Scotia coal up part of the way to Ontario ports. I do not see how it could be worked out on any practicable scheme.

By the Chairman:

Q. Each boat would be carrying coal to the most distant ports?—A. The most serious trouble we have in bringing coal up the St. Lawrence now is to find cargoes of pulpwood and other things coming down the lake.

By Mr. Ross:

Q. Could we not get return cargoes of something from Toronto to go down there?—A. I could never understand why we should allow the free use of our canals in Canada to boats bringing down American coal into the St. Lawrence. Now, Mr. Keefer has his scheme, with which I am more or less in sympathy, to make Port Arthur the sea-port; but before that scheme is developed there should be some revision of the existing treaties between Canada and the United States whereby the large number of American steamers using our canals should pay toll. Canal tolls are imposed on the Suez canal and at the Panama canal. and there are two Bills now before Congress in which they propose to give preferential treatment to American steamers as against British or Canadian boats going through the Panama canal. Therefore, if they can tax our steamers passing through the Panama canal, we should surely be in that position, when we expend hundreds of millions of dollars, in which the people of Nova Scotia have a joint interest.

By Mr. Chisholm:

Q. There is no assurance that they are going to do that?—A. What I mean to say is, if they do it, it should be part of the scheme that we should get a canal toll on the boats using those canals on the way down.

Q. You said a moment ago, in reply to Mr. McKenzie, that barges could only be used for two months in the year. Is it not a fact that barges are used exclusively in the south for carrying coal?—A. They are used on the American coast but they are used only, as a rule, on the American coast, where they have milder weather than we have, as you know—warmer weather.

[Mr. Alexander Dick.]

Q. Do they not carry that coal down as far as the South American ports?—A. No, they send it down to the South American ports in steamers.

Q. You mentioned two months as the season from Sydney to the St. Lawrence?—A. Yes, from June 15 to the middle of August.

Q. What is the matter with May 15?—A. As a rule navigation does not open very early; there are ice conditions in the month of May.

By the Chairman:

Q. The trouble would be from storms?—A. Storms. As you know, we have had very unfortunate experience in losing barges in tow of steamers. Off the Nova Scotia coast we lost the Rembrandt, which disappeared with all the crew. Then the Dominion Coal Company lost two or three barges before my time, off the Nova Scotia coast, and there was always a great deal of trouble bringing the barges up, and having the tow-lines part in the heavy seas in the Gulf, and having in view the safety of the crews, the lives of the crews, we abandoned it.

By Mr. McKenzie:

Q. Towing in heavy seas is practically impossible?—A. Towing in heavy seas—we abandoned it.

By Mr. Douglas (Cape Breton):

Q. Would not this be a practical suggestion—taking the coal up by water, one of the difficulties, amongst others that have been mentioned, would be that that could only be done in the summer months from Montreal up to Toronto and lake ports?—A. Yes.

Q. What would you think of this suggestion—that the coal should be taken from Nova Scotia and discharged into overhead discharging plants and storage plants over the railways; that one of the trunk lines between Montreal and Toronto should be used as a coal-carrying road, so that the coal that was stored there during navigation could be supplied to Toronto during the winter months as well as during the summer months? Having the coal stored, say, at Montreal would enable it to be carried to Toronto in winter; what do you think of that suggestion?—A. Well, that sounds like a very feasible scheme, but without going into it too deeply, I would think that it would be better, perhaps, to have a more even distribution of the coal. There is no necessity to store it all at Montreal. The time to move coal cheaply is to move it in summer-time; we can move it by rail much more satisfactorily, and store it at the point of consumption. That would be the proper thing—take it right along in the summer.

Q. The suggestion would be that what you could not take care of in the summer could be stored so as to be utilized in the winter?—A. Yes. That scheme, I think, is well worthy of consideration.

Q. It has been said that idle times in the collieries are due to the fact that there was an embargo placed on coal for export during the last season; in your opinion, had the idle time anything to do with the fact that that embargo was placed on coal? A. No, connection whatever with the embargo. I will explain to you the reason why that is so. Contracts for coal shipments in Europe automatically expired December 31st, except in some instances where there were extensions granted during the time. During the month of December Mr. Carvell told me that he would freely issue permits to any persons making application for them in order to ship coal. We did all we could to make some shipments of coal in December, but at the 31st of December the contracts expired, and the coal that would have been shipped on those contracts during the time between August 1st and December 1st was sold or distributed to other parties, and the mines worked to produce that coal; and if that coal had not been mined and produced and sold, then the coal that would have been shipped under the contract would have been mined and sold to meet the contracts.

[Mr. Alexander Dick.]

Q. So that it is correct to say that the embargo had no reference to the idle time?
A. No reference whatever to the idle time.

By Mr. Chisholm:

Q. You are speaking now for the Dominion Coal Co.?—A. Quite so.

Q. You have not in mind the mines of Inverness County.—A. Well, I would say that so far as the mines of Inverness county are concerned, you would have been precluded from shipping coal by export this winter very largely on account of ice conditions after December 31st.

Q. No, we had our plant at Hastings?—A. I know, but you do not usually ship at Hastings during the winter.

Q. Oh yes, the coast is always clear there and it is just as good a port as Louisburg, practically, except that sometimes the ice covers there.—A. never saw many ships loading there in the winter-time.

Q. No, but they would have loaded there last winter were it not for this embargo; but it simply practically closed down the mines at Inverness and Port Hood?—A. I am not prepared to speak about the Inverness situation, but as far as Cape Breton is concerned—

Q. I do not want that to go down as an answer—that the embargo had nothing to do with our hard times in Nova Scotia mining; it is true the Dominion Coal Co. was not affected, but as far as Inverness was concerned it practically paralyzed the mines, as a matter of fact.—A. I am not prepared to talk about the Inverness mines.

By Mr. Douglas:

Q. The idle times in Pictou County had no reference to the embargo either?—A. I would think not.

By Mr. McKenzie:

Q. You have a general knowledge of the coal fields of Nova Scotia?—A. Yes.

Q. Apart from your own areas, and your own operations, which are the Dominion Coal Company, and Springhill, what other coal fields are being operated in Nova Scotia?—A. Well, in the Cumberland coal fields, there is the Joggins mine and probably a dozen smaller concerns operating through Cumberland county; they are small operations, some of them. Then in Pictou county you have the Intercolonial Coal Co. operating at Westville; the Greenwood Coal Co. operating at Thorburn. In Cape Breton you have the Port Hood Co. in Inverness, and the Inverness Company in Inverness; and in Cape Breton county you have the Bras d'Or Coal Co. and the Indian Cove Coal Co., and the Stubbart Coal Co., at Boulardaries; and there is the Anglo Co., at New Cambridge, and the Mora Company out at False Bay.

Q. It is not altogether right to say that you have a monopoly on the coal fields in Nova Scotia?—A. No, not exactly.

Q. I notice that Dr. Cowan made use of the expression several times, a sweet morsel he rolled under his tongue, that you had a monopoly. That is not so?—A. No, that is not so.

The Chairman:

Q. You have not 100 per cent monopoly, Mr. Dick?

Mr. COWAN: We will let Mr. McKenzie get off his joke. He is saying it with a smile.

By Mr. McKenzie:

Q. The chief purpose we have in mind in this Committee is to see how we can extend the markets into Ontario. That is really the principle object we had in coming here. Supposing 5,000,000 tons of bituminous coal fairly well supplied the market

[Mr. Alexander Dick.]

for whatever domestic use they give to the bituminous industry in Ontario and you are assured of a fixed market every year, 5,000,000 tons of coal in addition to what you are producing now, could you so arrange your increase of production to look after that market?—A. We would.

Q. If a market was assured you could assure the supply?—A. We could assure the supply if we could get the market.

By the Chairman:

Q. In the course of time?—A. In the course of time, yes. I know it would not be in a day or a year.

By Mr. Douglas:

Q. Do you know if it is the policy of the company to do that?—A. Yes, it is the policy of the company to enlarge the output to 10,000,000 tons a year production.

By Mr. Cowan:

Q. It is simply a case of getting your costs to a point where you can compete?—A. Exactly.

The CHAIRMAN: Anything further to ask Mr. Dick? I promise we might close Mr. Dick's examination as the present time. I think he is just as satisfied as we are to close it up. It might be necessary at a later date to recall Mr. Dick to clear up some things so we will not discharge you.

WITNESS: I thank you very much for your courtesy and consideration. I would be delighted to give you all the information I have.

The CHAIRMAN: We thank you for your evidence. Will we meet to-morrow and arrange for Mr. McDougall of the Nova Scotia Coal Company to appear before the Committee?

Mr. CHISHOLM: We have Mr. McLennan here, I would like to ask him some questions. It will only take a few minutes, because there is nobody has any interest in that field except myself. Mr. McLennan is a member of the local legislature of Nova Scotia. He has been here three days. Would it be possible to sandwich him to-morrow?

Mr. COWAN: I suggest we start a little earlier to-morrow morning. We will have to get through by half-past eleven to-morrow morning. We have another important meeting.

The CHAIRMAN: If the Committee are willing to come together at ten o'clock we will hear Mr. McLennan. Mr. McDougall is asked to come at 10.30.

Mr. COWAN: Suppose we have Mr. McLennan at 10 o'clock to-morrow. Is that satisfactory to the Committee? We passed a motion the other day.

“Mr. Ross moved seconded by Mr. Cowan:—

“That coal operators called as witnesses by this Committee be obliged to furnish the Committee with detailed monthly statements from 1912 to date of the cost of production of coal per ton showing therein all items separately entering into said cost, said statement to be certified by their auditors.”

Mr. DOUGLAS: My suggestion was this; the costs statements of the collieries are kept on very large sheets, and it would be an immense amount of work to re-copy these sheets as that would undoubtedly have to be done, whereas the originals are on file in the collieries offices of all companies. If these sheets were brought here—it is a great many years, covering from 1912 up to date—it would be a great deal less work and a great deal more satisfactory. There will be items in the costs such as depreciation and other items that naturally enough it will be necessary to examine

[Mr. Alexander Dick.]

the auditor on, as to the type of depreciation, different items and there has to be some examination to know just exactly what those things mean. The whole thing depends upon the question of cost. Mr. Dick makes the statement to the effect that the cost was \$3.40. Any person that keeps costs can make it almost anything they like if they have a free hand. But if we had the original cost sheet and the man who kept them and who was capable of explaining the items, I think it would be more satisfactory to the committee and we would get at the actual results, and that is the reason I was suggesting the auditor of the company be asked to give evidence and be asked to give the original cost sheets from 1912 up.

Mr. Ross: I quite agree with Mr. Douglas. One of the most important factors in the whole investigation is the question of cost. We know what profits they are making and we know whether they can, as a matter of business bring coal into Ontario, but as Mr. Douglas says, they can produce any statement they like here pretty much, and we don't know what it really means unless we can examine some person who knows what each item amounts to. I am in favour of Mr. Douglas' idea.

Mr. Cowan: I should think they would prefer to come rather than to send their statements.

The Chairman: May I lay this before you: The only point I am interested in is keeping the committee doing their business in a proper way. The committee the other day decided on this policy. We have only four of the committee present now. Some who are here now were not here then. Why not postpone this until to-morrow until we have a full meeting of the committee, and if the committee desires to reverse their policy and take it up in the usual method they can do so.

Mr. Chisholm: You must rush it because it will take all your time to get all these returns.

The Chairman: Does that suggestion commend itself to the committee?

Mr. Douglas: I am quite agreeable to what the committee does.

Mr. Ross: I think we have to do it quickly because this session is not going to last more than four or five weeks.

Mr. Douglas: We don't want to meet every day and afterwards have the whole thing aborted.

Mr. Cowan: I think after we get the evidence in we will have to consider it.

The Chairman: I don't think it is fair for four members of the committee to reverse the policy. We will adjourn until to-morrow at ten o'clock.

The committee adjourned until Tuesday, April 26, at 10 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

TUESDAY, April 26, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10 a.m., the Chairman, Mr. Steele presiding.

The CHAIRMAN: The Committee will please come to order. Before we resume the examination of witnesses this morning, I have a few letters here which I think I should lay before the Committee for the records.

The Committee will remember that in the early period just after the Committee was appointed the Chairman was directed to write to the Premiers of the different provinces regarding the appointment of our Committee, and asking for their co-operation, a copy of which letter was placed on the records. I have some replies which I will read to the Committee.

"OFFICE OF THE PRIME MINISTER

"Province of Quebec

"Quebec, April 11, 1921.

"M. Steele, Esq., M.P.,

"House of Commons,

"Ottawa.

"Dear Mr. Steele,—I am in receipt of your letter of April 8, informing me of the appointment of a Special Committee of the House of Commons to inquire into all matters pertaining to future fuel supply of Canada.

"As this matter comes under our Department of Lands and Forests, I am referring your letter to my colleague the Hon. Mr. Mercier.

"Yours sincerely,

(Sgd.) L. A. TASCHEREAU."

I have here another letter which reads:—

"OFFICE OF THE PRIME MINISTER

Victoria

"April 14, 1921.

"Mr. Steele, M.P.,

"House of Commons,

"Ottawa, Ont.

"Dear Mr. Steele,—I am in receipt of yours of the 8th inst. *re* your Committee to inquire into all matters pertaining to the future fuel supply of Canada.

"I would be pleased if you would forward me a copy of the instructions given to the Committee.

"Yours truly,

(Sgd.) JOHN OLIVER."

I may say that in reply to that letter I sent Mr. Oliver a copy of the motion with reference to the Committee.

I have another letter which reads:—

“PREMIER’S OFFICE,

“Saskatchewan.

“Regina, April 18, 1921.

“Dr. M. Steele, M.P.,

“House of Commons,

“Ottawa, Ont.

“Dear Dr. Steele,—I have your letter of the 8th instant, with regard to a Special Committee of the House of Commons to inquire into matters pertaining to the future fuel supply of Canada. I am referring your letter to the Bureau of Labour and Industries, and it is just possible that some statement may be forwarded by the Bureau for the information of the Committee.

“Yours faithfully,

(Sgd.) W. M. MARTIN.”

Another letter:—

“OFFICE OF THE MINISTER AND THE PRESIDENT OF THE COUNCIL,

“Toronto, April 21, 1921.

“Dear Mr. Steele,—I am in receipt of your letter of the 8th instant, advising me of the appointment of a Special Committee of the House of Commons to inquire into all matters pertaining to the future fuel supply of Canada and intimating that your Committee will be pleased to hear any representatives of this province in connection therewith.

“I desire to thank you and your Committee for the opportunity thus afforded and state that the Government will be glad to co-operate in every way in its power in assisting to accomplish the very important object you have in view.

“I therefore suggest that the various branches of the subject can be dealt with at your convenience from the point of view of this province by the following gentlemen:

“As to the consumption of coal in Ontario, Mr. H. A. Harrington, formerly Fuel Controller for the province;

“As to the use of natural gas for fuel, Mr. E. S. Estlim, Natural Gas Commissioner.

“As to the probable development of our peat resources, Mr. A. A. Cole, Chairman of the Joint Peat Committee.

“As to the utilization of electrical power as a substitute for coal for power purposes, Mr. F. A. Gamy, Engineer of the Hydro-electric Power Commission.

“As to the use of wood in the rural districts by farmers, and the question of firewood generally, Mr. E. J. Zavitz, Director of Forestry.

“As to the utilization of our Government Parks for purposes of obtaining wood fuel, Mr. Thos. Gibson, Deputy Minister of Mines.

“Any or all of the above officials will be able to give you authentic information, and will, I have no doubt, be glad to attend your Committee at such times as may be mutually convenient.

“Yours sincerely

(Sgd.) E. C. DRURY.”

I have this morning received the following letter from the Commissioner of Labour and Industries of Saskatchewan.

"REGINA, April 23rd, 1921.

"Dr. M. Steele, M.P.,
House of Commons,
Ottawa, Ont.

"Sir,—Your communication of the 8th instant, addressed to the Premier has been referred to me by the Premier with instructions to communicate to you such observations as may be deemed pertinent to the enquiry being conducted concerning the fuel supply of Canada.

"While this province has almost unlimited resources in Coal, nevertheless, owing to the low-grade qualities of our own lignite, we are dependent upon the province of Alberta for the great bulk of our fuel supply each year. Experiments being conducted with a view to the utilization of our own lignite, as well as the testing out of new coal fields, may in the future somewhat lessen dependence upon Alberta for fuel; it is expected, however, that no radical change in the situation can be looked for for a considerable number of years. Alberta coal coming to Saskatchewan has not always been satisfactory, either as to the cleanliness or as to the grade. During the rush season of the early winter, cars of coal containing a very high percentage of dirt in the way of stone, Black Jack, and other impurities are shipped into this province. Another trouble we have with Alberta fuel is the substitution of a lower grade of coal than that ordered. Instances have occurred where local dealers or consumers have ordered coal from a certain field or of a certain grade and have received an inferior fuel from an entirely different field.

"There is apparently no standard of size, cleanliness or grade that is enforceable by law, and we believe that some such standardization covering all three points is essential.

"As to the price of coal, one cannot but observe that the increase in the price of Alberta coal to the consumer has been more rapid than has been the increase in the consumer's ability to purchase higher priced fuel. With our rigorous winter climate, coal is a necessity of life. The increase in the wages of mechanics, artisans, and labourers in Saskatchewan, or the increase in earnings of farmers and merchants has not by any means advanced as rapidly as has the increase in the cost of fuel. Many of our people are coming to the conclusion that with a severe winter when possibly 15 or 20 tons of coal will be required for the ordinary residence, it is cheaper to close up the house, send the family to California for the winter, and the husband or father pay his board and lodging at an hotel or rooming-house, than it is to live in their own home and purchase fuel at present prices.

"From the foregoing you will observe that a proper grading or classification of coal, a guarantee as to its cleanliness and a reasonable price are of utmost importance to the coal consuming public of Saskatchewan.

"Should your Committee be of the opinion that further information would be of assistance in the present enquiry we will be glad to assist you in any way possible."

"Faithfully yours,

(Sgd) Thomas M. Malloy,
Commissioner".

Mr. DOUGLAS (Cape Breton): It looks as if we would have to go into the high cost of living in California.

The CHAIRMAN: Then I have received the following telegram from Edmonton, dated April 25th, 1921.

"M. Steele, Esq.,

Chairman, Fuel Com., Ottawa, Ont.

"Your wire received glad to give evidence third but not being connected with any coal company will require compensation for time on this work in addition to travelling expenses.

(Sgd) L. H. Drummond."

You will remember that a few days ago we decided to call Mr. Drummond at the request of the Manufacturers' Association to give evidence in connection with the industrial phase of supply. I have wired him to the effect that the Committee would reimburse him for his expenses. This is his reply: What do you wish to do with it?

Mr. COWAN: What does he want? Read it again.

The CHAIRMAN: That he will require compensation for his time in addition to travelling expenses.

Mr. DOUGLAS (Cape Breton): Is there not somebody else who knows as much as he does about it, and who lives nearer.

The CHAIRMAN: I think we should be able to find somebody.

Mr. CHISHOLM: We cannot consistently pay him without paying the others.

Mr. COWAN: I do not see how we could pay him, Mr. Chairman.

The CHAIRMAN: Does the Committee agree then that we shall not call Mr. Drummond under these terms?

Carried.

The CHAIRMAN: We have with us here this morning Mr. MacLennan, a member of the Legislature of the Province of Nova Scotia.

DONALD MACLENNAN: Called, sworn and examined.

By the Chairman:

Q. You are a member of the Nova Scotia Legislature, Mr. MacLennan?—A. Yes.

Q. And you appear here to-day for whom?—A. Well, the Commissioner of Works and Mines told me to come up to see what was going on in this Committee, and to report to him, and to ascertain if there would be anything that he could do, and if there was I was to let him know and he would be willing to help the Committee out. He also told me to give the Committee any information I had in connection with the coal fields of Nova Scotia. When the evidence was given here by several witnesses, I observed that it was all confined to the Dominion Coal Company, that is, as far as Cape Breton was concerned, and I want to have the Committee understand that there are large coal fields in the country of Inverness which have practically not been touched.

By Mr. Douglas (Cape Breton):

Q. You mean not touched by the Committee or not developed?—A. Not developed.

By Mr. Cowan:

Q. What quality of coal is it?—A. Very good quality.

Q. Bituminous coal?—A. Yes.

Mr. CHISHOLM: Mr. MacLennan has only a short time as we took up a great deal of our time this morning in reading these letters, and I would like to hear him make his statement and then answer certain questions which I would like to ask him on that particular phase of the matter.

[Mr. D. McLennan].

By the Chairman:

Q. As we are not all familiar with the geography of Nova Scotia, I will ask you where Inverness county is?—A. It is in the western part of the Island of Cape Breton.

By Mr. Chisholm:

Q. Mr. MacLennan, what I am particularly anxious to do is to point out to the Committee that these areas of coal deposits have not actually been touched in the way of development, except in two or three places. You are well acquainted with all the facts connected with those coal deposits down there, as far as a layman can be, and I propose asking you a few questions to submit the facts before this Committee, to convince them of the enormous extent of our coal deposits at western Cape Breton, its quality and the need for proper transportation facilities.

The CHAIRMAN: Before he makes a statement?

By the Chairman:

Q. Have you a statement to make, Mr. MacLennan, or would you prefer our asking the questions, which Dr. Chisholm has suggested?—A. Yes, provided he does not preclude me from saying something myself.

The CHAIRMAN: I think we had better let the witness go on and make his statement.

Mr. CHISHOLM: Very good my purpose is to get the information before the Committee and the Country.

WITNESS: I was just saying that there are large deposits in the county of Inverness which are practically undeveloped. Within the past year, seams of coal eight feet in thickness, have been discovered between 15 and 20 miles from the sea—inland. There is no water communication, nor is there any railroad near it. There is coal at Port Hood—

By Mr. Douglas (Cape Breton):

Q. Whereabouts is that?—A. At Hayes River—a place called Hayes River, in the district of Lake Ainslee.

Q. How far from one of the important points in Inverness, so we will understand the geography? How far away from Port Hood or Inverness town?—A. It is inland, about half way between Inverness and Port Hood, but it is five or six miles from the railroad running from Inverness to Port Hood.

Now, there are mine deposits of the best coal possible on the island of Cape Breton at a place called Mabou. Very little development has been done there. It is not appreciable—the coal which has been extracted.

Further north again, is the Inverness coal field and while they have worked the seam for many years they are now beginning to develop an overlying seam which will enable them to take the coal out much cheaper than they have been able to take the coal from the old seams, and the Inverness coal is reputed to be one of the best possible domestic coals obtainable. As a matter of fact, the Inverness coal commands from \$1 to \$1.50 to \$2 per ton higher price in the city of Halifax than the coal they get there.

By Mr. Chisholm:

Q. For domestic or steam purposes?—A. For domestic purposes. It is also used for steam. It is good steam coal, but is particularly good for domestic purposes.

Now, further north again, there is a coal field at St. Rose which has not as yet been touched.

By Mr. McKenzie:

Q. Those three places you mentioned, Mabou, Inverness and St. Rose, are on the sea-coast?—A. Yes. There is Port Hood first on the sea-coast; Mabou next; Inverness next; St. Rose next; and then further north is Chimney Corner.

[Mr. D. McLennan].

Q. Yes, I wanted the Chairman to understand these were not inland, but were along the sea-coast.

The CHAIRMAN: I understand that.

By Mr. Chisholm:

Q. You have given us the areas very systematically. What is the estimated quantity of coal as given to us by geologists, that is, on western Cape Breton Island?—A. I took this statement this morning from one of the geological books, but I do not know where they got their figures, or how recent it is. This shows 242,800,000 tons, but I know since this book was published seams have been discovered which were unknown at that time.

By Mr. McKenzie:

Q. What do you say is there?—A. 242,800,000 tons.

By Mr. Chisholm:

Q. As a matter of fact, these are not the most recent figures, the figures are entirely too low. Later information recalls the fact that there are over a million tons?—A. I suppose not.

Q. Because unfortunately prospecting of western Cape Breton has not been completed—it has been only touched here and there?—A. Yes.

Q. This is the extent of the coal areas. I will say for the benefit of the Committee that there are seams undiscovered as yet; we are only touching the surface, because the seams underly one another. I know at St. Rose they have already located six seams.—A. That field has not been prospected at all.

Q. No, that is the whole thing?—A. Not even around the mines they operate has any prospecting been done.

Mr. CHISHOLM: The question will appear to the Chairman and the Committee why these fields have not been developed.

Mr. COWAN: That is the very thing that occurred to me. What is the matter down there?

The CHAIRMAN: I will ask the witness to make his statement as to the reason which appeals to him as explaining why these areas were not dealt with.

WITNESS: Well, transportation was the whole thing. Some twenty years or so ago, McKenzie and Mann built a piece of railroad from the Strait of Canso, 62 miles to their own mines. They own a coal mine in the town of Inverness. That is the only means of transportation that is in the country.

By the Chairman:

Q. Have you any water transportation?—A. Unfortunately the harbours have never been dredged. There is, in the strait of Canso, a splendid shipping place. McKenzie and Mann had a large pier there from which they shipped the coal; In fact, they shipped coal to Europe from that pier in very large vessels,—

By Mr. Douglas (Cape Breton):

Q. They can ship in 6,000 or 7,000-ton vessels from there, Mr. MacLennan?—A. I am not prepared to say as to the tonnage, but I know there are very large ships go there. They are over 4,000 tons anyway; so large that it is economically sound to load vessels for Europe from that pier, and consequently I should say it would be all right to load vessels there for Canada.

By Mr. Chisholm:

Q. You can give some testimony as to this: What are the freight rates over that route? That route goes from the Strait of Canso, as Mr. MacLennan has said, [Mr. D. McLennan].

and touches the mines at Port Hood, but does not touch Mabou. The reason of my question is that I wish to show that even if that road is there there is very little encouragement for the development of the coal areas, and that is why I asked the question, what are the freight rates charged by that road?—A. Well, they charged the Port Hood people \$1.04 from Port Hood to Port Tupper, a distance of about 30 miles, I believe.

By Mr. Cowan:

Q. That is owned by McKenzie and Mann?—A. Yes, the Inverness Mine. It is in the hands of a receiver.

Q. Is this railway running under a provincial charter?—A. Yes.

By the Chairman:

Q. What is the freight to Halifax on that coal?—A. It formerly was \$1.60 a ton from Port Tupper to Halifax, but I think that has been increased since.

Q. You do not know the present rate?—A. No.

By Mr. Blair:

Q. How are they owned? Are any of them Crown lands yet?—A. Oh yes, but many leases have been taken up.

By Mr. Chisholm:

Q. Now, Mr. MacLennan, I want to bring out this transportation question because that is the solution of the whole field of development of Western Cape Breton Island. What is your suggestion with regard to the operation of the road that is now built? What, in your judgment, should be done with that road?—A. Well, first of all, I think that the harbour at Port Hood ought to be fixed up, dredged, to enable them to ship coal from Port Hood. Next, the railroad should be extended to the coal field of St. Rose—it is only a distance of 12 miles.

By Mr. Douglas (Cape Breton):

Q. Twelve miles from Inverness?—A. Twelve miles from Inverness north, and at Chimney Corners the coal field is the largest in the county.

Q. Just where does it connect with any other railway?—A. At Point Tupper, which connects with the National.

Q. Being a provincial charter are the rates controlled by the Railway Commission? Are they subject to appeal to the Provincial Government?—A. The Provincial Government.

Q. Then you would have to look to the Provincial Government for control of those rates?—A. Yes. I don't think the rates are any higher than the rates of the Canadian National. Not being through freights make it higher. They charge two freights, and we don't get the benefit of a through freight.

By Mr. Cowan:

Q. Do I gather from your evidence that MacKenzie and Mann by the course which they have pursued have prevented the development of other mines nearby?—A. I would not like to say that but it is a fact that these mines are not developed, and it is also a fact I am sure that non-development is attributable to lack of transportation.

By Mr. Douglas (Cape Breton):

Q. They built this line really for their own coal business at Inverness?—A. That is true.

[Mr. D. McLennan].

By Mr. Chisholm:

Q. Following up my idea, perfected by your idea, if this road were taken over as a branch of the Intercolonial Railway that would be the first solution?—A. Certainly, any company owning that road will see to it that their own mine is developed, and naturally enough they are not very solicitous as to the development of any other mine.

Q. In competition with them?—A. In competition with them, and that has obtained down in that country. I don't like to be strong about blaming any other company.

Mr. COWAN: We want to see what the situation is.

WITNESS: That is the situation.

By Mr. Chisholm:

Q. If you will allow me to pursue this argument a little further, you know Eastern Harbour?—A. Yes.

Q. You know that it is a beautiful sheet of water?—A. Yes.

Q. I suppose Mr. MacLennan might not know the depth of water there now, possibly as well as I do, but I am going to ask Mr. MacLennan, is it your judgment that that harbour can be deepened to a sufficient depth of water to enable shipments of coal in large ships? Yes, and I think at one time after the dredging had been done there it was deep enough.

Q. For the information of the Committee, Eastern Harbour is the original northern terminus of the Inverness Railway, and this is always our difficulty, the portion of road that was built terminated at Mackenzie & Mann's private property. If that road were extended from 29 to 32 miles that would bring it to Eastern Harbour where it was originally contemplated it should go?—A. Yes.

Q. If that were done Eastern Harbour being located closer to the mouth of the St. Lawrence river than any other coal shipping port in Nova Scotia would have a tremendous advantage over coal shipping ports in United States. Is that not true?—A. Yes.

Q. Is it not also true by reference to the map, you can see that navigation from Eastern Harbour to the St. Lawrence is safer than from any other point in Nova Scotia, taking in view fogs, etc.?—A. I really could not say, I should say it would be but of course I do not know.

Q. As a matter of fact that is true?—A. I always understood it to be so.

Q. Now, Mr. Chairman, it might appear to you that this is not giving great information. In my opinion it is the greatest information the Committee has gotten yet for the simple reason there are millions of tons of domestic coal and steam of finest quality, the very thing you want in Ontario, and that the only way to get at it is by the extension of this road to ship the coal of St. Rose and Chimney Corner from Eastern Harbour to St. Lawrence ports; the coal of Inverness, Port Hood, Mabou from Hastings.

The CHAIRMAN: Would the value of those deposits in your opinion, warrant this expenditure?

Mr. CHISHOLM: What do you mean by the value?

The CHAIRMAN: The commercial value.

Mr. CHISHOLM: As Mr. MacLennan has said this coal is superior to any coal in Nova Scotia for domestic purposes and equal for steam purposes. He has given that statement under oath and he is well justified because the fact is that in Halifax they are willing to pay \$2 a ton more for this coal than for any other coal in Nova Scotia.

The CHAIRMAN: Why don't the owners of the mine bear the expense themselves? Why do the owners not provide the transportation requirements you speak of?

[Mr. D. McLennan].

WITNESS: The reason is that unfortunately those areas are owned by several parties, and they have been holding those areas, some of the holders, a few of the holders, at least, have been holding them for speculative purposes, I assume; but in recent years I think there is sufficient legislation to enable those areas to be taken from anybody who endeavours to hold them for speculative purposes. I think that heretofore at least the reason no large company went down there was that the areas were held by so many parties.

By Mr. Cowan:

Q. Do the laws of Nova Scotia not require a certain amount of development? For instance, in our country, if you take out a mining lease you have to do a certain amount of development. If you don't do it you lose your lease. What are the conditions under the Nova Scotia laws?—A. I think under the laws of Nova Scotia heretofore as long as nobody else—and even that obtains to-day—as long as nobody else came forward to operate that lease the original holder was left undisturbed.

Q. That is a very bad law in my view. If you know these mines, the statement was made the other day that it was a costly thing mining coal in the Dominion Coal Company's mines. From your knowledge of those mines would it be less expensive mining in those fields you speak of than in the Dominion Coal Company's mines?—A. No, I don't think so.

Q. It would not be less expensive?—A. It would at the beginning, because they would not have the distance to go. There would be possibly many years, or for a few years it might be less expensive, but that would be on account of the mines being newly opened, newly developed.

By Mr. Chisholm:

Q. That is the only large virgin coal area in Nova Scotia—that is the only large area that has not been touched, practically speaking?—A. So I understand.

Mr. DOUGLAS (Cape Breton): Mr. MacLennan is confining himself mostly to Inverness.

Mr. CHISHOLM: That is what I am interested in, placing the conditions of Inverness county before the Committee, and I regard that as one of the great difficulties in Ontario, because I am convinced they can get coal cheaper in Inverness County than any other place in Nova Scotia, and of superior quality.

By Mr. McKenzie:

Q. What is the railway distance?—A. About 32 miles, roughly speaking.

By Mr. Douglas (Cape Breton):

Q. Do you know what the conditions are there all the year around? Would it be open in the winter?—A. Oh, no.

By Mr. Chisholm:

Q. This is for summer shipment, about nine months in the year.

By Mr. McKenzie:

Q. It would be open longer than the St. Lawrence?

Mr. CHISHOLM: Oh, yes, by far. I have now before my mind's eye the development, of the St. Lawrence trade, and the water development, the water carriage.

WITNESS: There was one statement, I understand, made by an official of the Canadian National Railways the other day, and I am informed that he said that the coal in the county of Inverness could not be banked because it would heat. Well, I never heard of the coal in Inverness county being more susceptible to spontaneous

[Mr. D. McLennan].

combustion than any other coal in Nova Scotia, and moreover I personally know that there was coal put in the pier pockets at Hastings from Port Hood mine, the first of March, 1920, and that it remained there until about the 4th of May, and on the 4th of May it was loaded into a steamer and that it was transported to Holland and that they had no trouble with the coal. From that I would say that any coal that would be lying in the pockets for two months and then taken to Holland and sold there, that if it is safe enough for transportation to Holland, it ought to be safe enough for transportation to any point in Canada.

By Mr. Douglas (Cape Breton):

Q. It is certainly not as spontaneous as its competitors claim? That is true?—

A. It is not spontaneous at all.

The CHAIRMAN: Except in a legitimate way.

By Mr. Chisholm:

Q. The fact of the matter is that all Nova Scotia coal is more or less spontaneous, any coal for that matter, all bituminous coal. Here is another question I want to ask; can you give the Committee any idea of the producing capacity of Inverness county, with the mines now located there, of which we know, what would be the capacity of your mines? It is a big question?—A. You mean the whole of the areas that have been discussed?

Q. The daily producing capacity. In other words you have reached the capacity of your mine at Port Hood, at Inverness, at Ste. Rose, at Mabou, at Chimney Corner? Can you give the Committee any idea of what those mines can produce?—A. The production would largely depend on the capital expended. There is no doubt if you expend about a million and a half dollars I suppose for every submarine mine, that you will get about a thousand tons a day, between one million and one million and a half dollars. I understand that in order to equip a mine for the production of a thousand tons a day some years ago it required in the neighbourhood of \$750,000. Things have gone up so high since I think it would go a good deal over a million. There is a mine at Mabou which would be capable of producing 2,000 tons a day with the proper expenditure. There is the Inverness mine which was producing 1,200 tons, and as high as 1,400 tons a day some years ago. There is the Ste. Rose mine, with an expenditure of capital sufficient, say, one million or a million and a half dollars would also produce 1,000 tons.

Q. In the same position?—A. In the same position.

Q. In other words it would be possible to produce in Inverness County between 8,000 and 10,000 tons a day?—A. If there was enough money obtainable to develop them I suppose it would.

Q. So, Mr. Chairman, you will see the capacity of the mines, the quality of the coal, the means of transportation, economical, of course, and you can see that one of the great solutions of your proposition, coal supply in Ontario, is down there in that Western Cape Breton Island?—A. I think the great solution of the province of Ontario, if the gentlemen from the province of Ontario will see to it that transportation is provided that they will get the coal cheaper than anywhere else.

MR. CHISHOLM: So that after all the Dominion Coal Company, as you see now, is not the only concern owning coal in Nova Scotia.

By Mr. Cowan:

Q. Does the fact that you have already a great big coal company there practically dominating things at all retard the development of these smaller companies?—A. I suppose Mr. Alexander Dick is possibly smarter at selling coal,—at least he thinks he is, than we are.

Q. Has your Government any trade commissioners, or anything else to look after the interest of the smaller mines? The big companies there say they are capable of looking after their own. Have you any trade commissioners at all?—A. No.

[Mr. D. McLennan].

Q. Has the Government any policy in regard to it?—A. They never went into the coal business and I don't suppose they will. Of course the Government of Nova Scotia is always very sympathetic to anybody who would desire to develop coal areas, so much so in point of fact that they have advanced money to people whose capital was circumscribed to help them out. The great difficulty is to get somebody down there to get busy. That is about the sum and substance of it. All we want down there is somebody who has money to open up the mines and to get transportation. The coal is there and the quality of the coal is all right. There is some of it possibly for certain purposes superior to other coals in the province, but speaking generally it is not any better coal or any worse.

The CHAIRMAN: Any other questions to ask Mr. MacLennan? Anything further to place before the Committee, Mr. MacLennan?

WITNESS: No, if you will suggest anything to me that in your estimation we ought to do in Nova Scotia, I would be very glad to convey the message to the Commissioner of Works and Mines.

The CHAIRMAN: We will consider that in dealing with our report. Thank you very much for your assistance in this inquiry.

By Mr. Douglas (Cape Breton):

Q. On the question of production of coal in Nova Scotia, the annual report for 1920 of the mines of Nova Scotia, is the one you refer to?—A. Yes.

Q. What is the quantity of coal produced by the Dominion Coal in 1920?—A. It is here.

Q. That is a statement of production for that year.—A. Production, 3,222,725.

Q. Now the Nova Scotia Steel Company?—A. 629,637.

Q. Now the Acadia Coal Company?—A. 529,641.

Q. And the Cumberland Coal and Railway Company?—A. 413,706.

Q. These companies are now, as I understand it, in this British Empire Steel Company, the new merger, so called?—A. Yes.

Q. You gave the figures, 3,222,725, and the other figures as well. That totals I think you will find 4,816,288. Can you tell us without doing any figuring—I figured it out myself—but without doing much figuring, just what proportion of the output of coal in Nova Scotia is controlled by the British Empire Steel Corporation, or the merger, so called, what proportion of the total output?—A. Oh, well, it is all controlled except a very small percentage, controlled by the others; that is of the output of coal as distinguished from the ownership of areas.

Q. Absolutely?—A. Yes.

Q. It is a question of production?—A. Yes.

Q. The total production for the province?—A. 9,687,970½ tons in 1920.

Q. And the merger companies quoted—I will give the figures to Mr. MacLennan, the total, \$1,816,288. That is all I wish to ask.

The CHAIRMAN: We thank you for your attendance. The examination of Mr. MacLennan is finished.

Mr. D. H. McDougall, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. President of the Nova Scotia Steel & Coal Company.

Q. Any other?—A. Vice President of the Acadia Coal Company, Vice President of the British Empire Steel Company.

Q. What has been your past experience in connection with the coal industry?—A. I have been engaged in the coal and metallurgical industry all my life. I was for a [Mr. D. McLennan].

great number of years mining engineer for the Dominion Coal Company. I am certificated mine manager for the province of Nova Scotia. I am a past President of the Canadian Mining Institute, the Mining Society of Nova Scotia, a member of the Council of the Canadian Society of Civil Engineers, a member of the Mining Institute of Canada and also the American Mining Institute. I was Superintendent in charge of mines for the Dominion Steel Corporation, from about 1904 I think until 1909 and at that time I took charge of the operations of Dominion Coal Company, eventually became General Manager and was General Manager of that company until 1918. Part of that time I was also General Manager of the Dominion Steel Company, now the Dominion Steel Corporation. I left their service in 1918.

By Mr. Cowan:

Q. You are not in their service now?—A. No.

Q. What is embraced in the Nova Scotia Steel and Coal Company?—A. The steel works at Sydney Mines, five coal mines at Sydney Mines and rolling mills at Trenton, Nova Scotia. There is a car works at Trenton, N.S.

Q. Any of these controlled by subsidiary companies?—A. The Eastern Car Company is a subsidiary of the Nova Scotia Coal Company.

Q. The others?—A. I am also President of the Eastern Car Co.

By Mr. Douglas:

Q. You were asked any others?

By the Chairman:

Q. Any other subsidiary companies?—A. The Nova Scotia Steel and Coal Company owns and controls the stock of the Acadia Coal Company, owns almost the stock in its entirety now.

Q. Have you prepared a general statement which you wish to present to the Committee prior to the examination?—A. I have prepared a general statement, making a general comparison between mining conditions in the United States and mining conditions with our company in Cape Breton, because of the statements that have so frequently been made with reference to the difference in cost between American coal mines and Nova Scotia coal mines.

Q. We would be glad to have that statement.—A. I will be glad to read the statement; it will probably save time. (Reading)

“A great deal of criticism has been aimed again at the companies engaged in coal mining in Nova Scotia because of the high cost of coal there as compared with the cost of coal produced in the mines of the United States. It is interesting to note however that American mining conditions, owing to the great supply of coal available in the United States, the nature of the deposits and the ease with which they can be worked, are not comparable with mining conditions in Nova Scotia where the coal deposits are different in nature, where the average thickness of the seams are less, where the coals lie at quite a heavy angle of inclination below the points of entry, and where in the great majority of cases the coal is extracted from underseas areas.

“No submarine coal mining is done in the United States. Compared with mining under the land, submarine mining is difficult and costly because there is only one place where access can be obtained to coal under the sea, namely, somewhere back of the shore line. In Cape Breton the coal seams continue indefinitely under the sea dipping at inclinations varying from seven to thirty degrees.—”

[Mr. D. H. McDougall].

By Mr. Douglas:

Q. You are not dealing with Acadia and Cumberland at all when you say Nova Scotia because they are not submarine at all?—A. I suppose we can regard Cape Breton as part of Nova Scotia?

Q. That statement is not correct. That is the point I make. I join issue with the statement at once when you say Nova Scotia.—A. You would not regard Cape Breton as part of Nova Scotia?

Q. I do as part of the province but the statement is what I am referring to. You are talking about submarine mining and there is no submarine mining.

The CHAIRMAN: Mr. Douglas wished I think that your statement should be confined to Cape Breton.

Mr. DOUGLAS: I join issue with that statement as being incorrect.

Mr. COWAN: That can be brought out afterwards.

Mr. DOUGLAS: If the statement is incorrect we should call the attention of the Committee to it at once.

The CHAIRMAN: Go ahead with your statement.

The CHAIRMAN: (Reading) "This means that as the coal is taken out the working places get further and further away from the point at the shore where there exists the only opening (or openings) where air, power, timber, horses and men can obtain entrance; and the only place where the coal can be taken out. In a land operation, it is possible to sink shafts at convenient points, and whenever it is required to shorten a haul, or improve the ventilation, or shorten the distance men have to travel to work, a shaft is put down. In submarine mines all the operations of coal hauling, transmission of power, creating ventilating currents, getting men to the face of the coal and back to the surface again, and pumping the mine water, are cumulative, always and everlasting increasing. The mining of coal from a submarine colliery must inevitably cost more day by day and year by year. It is a problem of transport, with ever-lengthening lines of communication.

"In Cape Breton submarine mining operations it is necessary to leave not less than 50 per cent of the coal for the support of the overlying strata which in turn supports the bed of the ocean. This lessens the amount of coal that can be mined. It also increases the amount of timber required for roof support, which is not only a matter of material expense, but a heavy labour expense. In some of the submarine mines these timbers only last a short time, and must be replaced again and again, with repetition of the expense."

"In the bituminous mines of the United States, so far worked, the coal seams lie at shallow depth, and it is possible to take the coal out in one operation, or to recover in a second operation practically all the coal left to support the roof in the first operation. The expenditure for timber is much lighter, is rarely renewed, and is often retrieved and used again.

"In a submarine mine, because of the supporting pillars that must be left, the working places (which represent the coal that is taken out) must travel much faster than in the land mines, where more of the coal is taken out and less coal left for support. This means that roads, power lines, pump lines, travelling ways for the workmen and horses, and length of travel of the air currents, grow at least three times as quickly in length, difficulty of maintenance and operation, as in a typical land mine such as is usual in the United States.

"Much larger ventilating fans, requiring larger engines to drive them; stronger pumps, requiring more power to operate them, longer pump lines, requiring heavy expense in purchasing pipe, longer and larger air lines, carrying compressed air to be used as a motive power, and special haulage arrangements to take men to and from work, are required in a submarine mine than in the land mine.

[Mr. D. H. McDougall].

"The amount of time spent by the workmen in travelling to and from the working places takes up a larger part of the working day than in a land mine, and this is a problem that gets less easy of solution day by day. Some Nova Scotia coal mines are now two and a half miles out to sea, and the major part of the coal comes from areas more than one mile distant from the shore line."

This is, as Mr. Douglas says, in Cape Breton, if you wanted to distinguish Cape Breton from the rest of Nova Scotia.

Mr. DOUGLAS (Cape Breton): You will see how important this is.

WITNESS: It did not appear to me before.

By Mr. Douglas (Cape Breton):

Q. You say as the result of the question of comparing your own properties in the Cumberland field, which is a land property, and the Acadia property, which is also a land property, with the submarine properties, you say at once that the cost was higher on the land properties. That will be admitted. There is no doubt about that. A. I think perhaps you did not hear me, but I said at the very beginning that I wished to refer to the conditions prevailing in regard to the mines of the Nova Scotia Steel and Coal Company—

Q. Your argument is that it is very expensive mining on account of being submarine, and I propose to ask you a question: Is it more expensive to mine coal in the Cape Breton submarine areas than it is in the land fields of Cumberland and Pictou, and your answer, of course, will be that it is more expensive in Cumberland than it is in Cape Breton, and that it is more expensive in Pictou than Cape Breton, and your books will establish that fact?—A. I am not so sure about that.

The CHAIRMAN: I would suggest that Mr. McDougall complete his statement and then we question him on the details.

WITNESS: Mr. Chairman, if you care to limit this reference to Cape Breton I shall be very glad to make the change, if it will clarify the explanation in any way.

"Electricity is a much more suitable form of power for a mine than compressed air, as it can be transported long distances with less loss in efficiency. Under the Coal Mines Regulations Act of Nova Scotia the use of electricity underground is prohibited for many purposes for which it is freely used in the United States. A modern colliery working under such conditions as are usual in the United States, would not use more than 5 per cent of its output in operating the mine where electricity is generally used. In Cape Breton submarine collieries, using compressed air, the coal required to raise the coal, to ventilate and pump the mine and take the men to and from their work, will range from 13 to 20 per cent of the total output."

I think again it might make this statement clearer, by calling this "Cape Breton," and I have changed the words "Nova Scotia" to "Cape Breton."

By Mr. McKenzie:

Q. When you take out Cape Breton, there is not much left?—A. That is what we think, Mr. McKenzie, those of us who come from Cape Breton.

"As compared with these difficult conditions of mining coal under the sea in Nova Scotia, the bituminous collieries in the United States that compete with Nova Scotia coal are operated under conditions that require less expenditure in pumping, in haulage, ventilation, and in conveyance of workmen, than at any mines in the world. Also, the practice and laws of the United States permit methods of mining that are forbidden in Nova Scotia because of their danger to human life.

[Mr. D. H. McDougall].

"In this connection it is interesting to note that the majority of the companies engaged in coal mining in Nova Scotia have not relied entirely on the experience of local coal mining engineers, but have at various times procured from different parts of Europe and from the United States some of the ablest mining men available in those countries, and these men after years of study and application have not been able to devise means of substantially reducing the prevailing cost of coal production in the province. It is, therefore, fair to assume that there are very great difficulties to be overcome in the extraction of coal in Nova Scotia.

"As a result of the difficult conditions attending the processes of mining and disposing of the coal produced in the province, it may be said generally speaking that practically none of the large companies have ever received more than a fair commercial return upon the money invested in the industry and the majority would have been better advised to have permitted their money to remain in bank.

"The Nova Scotia Steel and Coal Company began coal mining operations in 1901. Since that time, although about \$6,000,000 have been expended in improving and developing the property, and over 12,000,000 tons of coal have been extracted, the profit before making allowance for depreciation or depletion did not exceed 20 cents per ton or less than $3\frac{1}{2}$ per cent on the capital invested.

"The Acadia Coal Co. which had on deposit in bank approximately \$500,000 in 1908, decided to extend its operations in 1910 and concluded arrangements with Belgian capitalists to invest \$2,000,000 in the property. First preference stock to the extent of \$2,000,000 was issued for the money provided. Since 1908 the money supplied by the Belgian interests together with \$500,000 which the company had in bank, making a total of two and a half millions, has been used in equipping and developing the property, and after a period of ten years' operation, the Acadia Company owed the banks three hundred and fifty thousand dollars without having purchased any additional property or made any payment to its shareholders beyond the six per cent interest paid on the first preference stock. At the end of 1919, the Belgian investors were pleased to accept the amount of money they had invested in exchange for the preference stock they had received indicating that after ten years experience in operating the collieries, they were glad to get their money back and sever their connection with the property.

"Mining operations in all British countries during the years 1914 to 1918, suffered because of the patriotism of the men employed in the mines, and Nova Scotia was no exception. The men enlisting in the greatest numbers were the ablest men physically—the men who produced the coal—and the mines were left with a comparatively small producing force and with practically the same number of incidental or non-producing men, which meant that the total cost of the staff employed for handling the coal remained almost constant, while the amount of coal to be handled at each mine decreased substantially, resulting in a heavy increase in the cost of coal production.

"The coal mining industry of the United States was not similarly affected; on the other hand, the production from the bituminous mines of that country increased over thirty-seven per cent, and in 1918 was one hundred and fifty-six million tons greater than in the year 1914, while during the same period the production of coal in the province of Nova Scotia decreased from 7,263,485 tons in 1914, to 5,211,000 in 1918, or nearly twenty-eight per cent. Consequently at the conclusion of the war, the coal mines of the United States were in a much better condition to produce coal at a low cost than were any of the coal mines in Canada or Britain.

[Mr. D. H. McDougall].

"In addition to similar post-war conditions prevailing in Britain as in Nova Scotia, the coal seams and mining operations of that country are much more nearly comparable to ours than are those of the United States, with which we are so frequently and unfairly contrasted. The cost of coal production in England averages 40s., or nearly \$9 per ton."

By the Chairman:

Q. Does that complete your formal statement?—A. That completes the statement.

By Mr. Cowan:

Q. Mr. McDougall, you have some land mines, as you term them, in your company?—A. Yes, sir.

Q. You are mining those?—A. Yes.

Q. You say the submarine mines are much more expensive than the others, because of the fact that you cannot get down at convenient points?—A. Yes.

Q. How do costs compare in your land mines with the big mines which you are operating—which are submarines?—A. The costs are considerably higher in the submarine.

Q. Then why do you continue your major operations in these most costly mines? Why not use the other mines?—A. Because the most attractive seams in our areas have been worked out in the land areas, and must be followed out to sea in order to obtain the same grade of coal.

Q. The attractive seams in the mines you own have now been worked out on the land?—A. On the land, yes. That is, the portion of the largest and best seams of the land areas are comparatively small, as the great body of the coal lies in the submarine area.

By Mr. McKenzie:

Q. Perhaps the doctor does not understand that the same seam runs out; you can work it in the land areas, and then it runs out to sea, and then you work it out under the sea.—A. I might say, Doctor, that where the shore line runs approximately in a straight line like this (indicating), in many cases the seams are only found on the land for comparatively short distances, and the great body of the coal lies out in the submarine area, clear of the land.

Q. That only applies to the ones you own? The other mines of which you have told us are all land mines, are they not? If it is so much more expensive for you to operate these submarine mines, would it not save you money to get hold of these other mines and operate them? Why continue the expense of mining when there are others there?—A. When you have a power plant built and villages built, and your entire equipment concentrated it is sometimes much more advisable to continue operations into the undersea area than to move elsewhere and undertake the capital expenditure entailed in building up a new operation.

Q. You told us in your statement that electricity was prohibited in the Nova Scotia mines. Why?—A. Because of the presence of gas in the Nova Scotia mines it is considered inadvisable to permit the use of electricity.

Q. It is more dangerous?—A. It is considered that the sparking of electrical equipment is likely to cause an explosion of gas.

By Mr. Douglas:

Q. That is a very controversial question?—A. Yes, it is.

By Mr. Cowan:

Q. Do I understand there is more gas in the Nova Scotia mines than in others?—A. I think it is quite a safe statement to make that there is substantially more gas in the Nova Scotia mines than in the average American mines.

[Mr. D. H. McDougall].

By the Chairman:

Q. By whom is the use of electricity prohibited?—A. By the province.

Q. The Provincial Government?—A. The Mines Regulations Act established by the Provincial Government.

By Mr. McKenzie:

Q. About your coal areas: taking into account your own mines, and extending to other owners as well, what percentage of coal deposits in Nova Scotia would be submarine, as compared with the land areas—taking the whole province?—A. Well, without making a calculation, I cannot give you that figure exactly, but it seems to me probably 70 per cent—between 60 and 70 per cent.

Q. Seventy per cent would be submarine?—A. Yes.

Q. And comparing the submarines on Cape Breton Island with the mainland, what proportion of the submarine areas would you say were on the mainland, and what on the island?—A. Well, I would say that the proportion of submarine areas tributary to mainland operations is comparatively small.

By Mr. Douglas (Cape Breton):

Q. Where are they, Mr. McDougall? As small as they are, where are they?—A. Mostly in the Joggins district.

Q. There is no coal being mined submarine to-day in Nova Scotia proper?—A. No, I would not say that.

Q. That would not be a safe statement to make?—A. No, I would not say so.

By Mr. Chisholm:

Q. There is considerable at Joggins?—A. Yes.

By Mr. McKenzie:

Q. Any particular submarine mines?—A. No.

By the Chairman:

Q. Does the Nova Scotia Steel and Coal Company find a market for their own coal or is that handled by the Dominion Coal Company?—A. No, the Nova Scotia Steel and Coal Company has its own sales agent.

Q. Where has been your market in the past?—Your chief market?—A. During the war, most of our coal was consumed locally except what was supplied for the bunkering of transports, and troop-ships at Sydney Harbour, and at Halifax, and also, with the exception of a comparatively small quantity that went to Newfoundland, the rest was used within the province. That was during the war period. Previous to the war, the company sent a certain quantity up the St. Lawrence. I can give you the exact figures.

Q. Can you give us the exact quantities?—A. Yes.

Q. Of the total production?—A. Yes. Supposing I give you the year 1913, Mr. Chairman?

Q. Yes.—A. Now, in 1913, there was disposed of at Halifax and Dartmouth, 43,000 tons; North Sydney and local 15,000 tons; the balance of Nova Scotia, 6,500 tons; New Brunswick, 9,183 tons; Prince Edward Island, 7,573 tons; Newfoundland, 74,424 tons; Wabana, 9,237 tons; the province of Quebec, 179,861 tons; the Intercolonial railway, by rail, 14,344 tons; and the Intercolonial railway, at Levis, 97,404 tons. There were sold as bunkers 50,000 tons, and for the steel works 240,000 tons.

Q. That is the Nova Scotia Steel works?—A. Yes, the Nova Scotia Steel works and for local uses incidental to the steel plant operations and the coal mine operations. The local communities took 33,000 tons of coal, making a total of 780,615 tons.

[Mr. D. H. McDougall].

Q. Can you give us the figures for 1920?—A. 1920? Yes. Halifax and Dartmouth, 2,346 tons; North Sydney and local, 39,000 tons; balance of Nova Scotia, 3,000 tons; New Brunswick, 8,800 tons; Prince Edward Island, 800 tons; Newfoundland, 50,500 tons; our own mining operations in Newfoundland, 24,000 tons; foreign sales 34,000 tons; province of Quebec, 162 tons; domestic sales; Canadian Government railways 112,000 tons; bunkers, 47,000 tons; the steel plant about 230,000 tons;—that is the Nova Scotia Steel and Coal Company's steel plant at Sydney Mines.

By Mr. Douglas (Cape Breton):

Q. Is that statement confined to 1919 and 1920?—A. 1920 is what I was asked for.

Q. What statement are you quoting from?—A. 1920.

Q. Have you it for 1912, 1913 and 1914?—A. Oh yes, I have that.

By the Chairman:

Q. What is the total for 1920?—A. The total is 635,377 tons of which there is about 25,000 tons used at the collieries, which is shown here.

Q. You have a statement of other years there?—A. Yes. I have a statement covering the years 1911, 1912, 1913, 1914, 1915, 1916, 1917, 1918, 1919, and 1920.

Q. Perhaps you will hand that in for the records?—A. I would be very glad to, yes.

NOVA SCOTIA STEEL AND COAL COMPANY, LIMITED

NEW GLASGOW—NOVA SCOTIA.

COAL DISTRIBUTION

Years 1911-1920.

Inclusive (Gross Tons)

	1911	1912	1913	1914	1915	1916	1917	1918	1919	1920
Halifax and Dartmouth.....	22,015	31,214	42,619	43,852	29,903	16,733	16,854	7,227	7,465	2,346
North Sydney & Local.....	14,808	15,353	15,202	16,478	18,815	24,436	39,657	43,140	38,307	39,042
Balance of Nova Scotia.....	3,630	8,741	6,533	5,961	5,455	11,533	11,900	4,289	5,508	3,130
New Brunswick.....	7,790	8,549	9,183	7,170	8,677	29,044	38,650	5,334	22,754	8,795
P. E. Island.....	7,615	8,350	7,573	6,112	4,204		201		2,880	865
Newfoundland.....	88,995	70,881	74,424	82,533	62,276	54,563	40,971	19,791	60,162	50,574
Wabana.....		2,565	9,237	16,252	8,981	19,620	16,376	17,551	22,248	23,966
Foreign.....		12,758			765				37,942	33,991
Province of Quebec.....	240,562	253,268	179,861	210,310	135,305	32,760	18,779	695	372	162
Intercolonial Ry. Rail.....	6,393	40,352	14,344	58	8,256	49,780				
Intercolonial Ry., Levis.....	57,647	76,032	97,404	102,950						
Can. Govt. Rys., Water.....							3,616		17,696	
Can. Govt. Rys., Rail.....							22,206	10,990	33,117	112,062
Bunkers.....	54,222	49,992	50,422	54,756	60,900	38,154	16,877	5,308	74,545	46,711
Open Hearths.....	43,375	43,238	50,221	33,324	50,672	65,925	67,704	68,437	30,881	57,287
Washer.....	161,278	143,691	185,881	68,168	157,415	165,052	203,153	206,735	80,866	150,693
Engines, Cranes, Ry., etc.....	18,762	15,119	15,841	23,173	12,988	13,857	13,574	14,596	22,234	17,836
Workmen.....	15,742	16,432	17,212	16,698	13,432	11,666				
Trenton.....	1,268	1,027	1,828	2,712	5,195	26,805	44,504	66,438	34,408	4,327
Hudson Bay.....			2,829							
Eastern Car Co.....								15,398	6,844	
Halifax Plant (Bunkers).....									17,633	57,748
Used collieries.....	744,102	797,562	780,615	690,507	583,237	559,928	555,022	485,929	515,862	609,595
	30,166	36,969	27,440	47,271	28,510	32,267	20,265	16,970	29,261	25,782
	774,268	834,531	808,055	737,778	611,747	595,195	575,287	502,899	545,123	635,377

By Mr. McKenzie:

Q. What effect will the merger have on your capacity for production in the seams usually operated by the Nova Scotia Steel and Coal Co., within the same area although practically under different management? What effect will the merger have upon your capacity for production?—A. I believe, Mr. McKenzie, that as a result of the merger a very much larger quantity of coal will be tributary to the openings which now exist at Sydney Mines, that is, previous to the consolidation

[Mr. D. H. McDougall].

of the companies some of our mines were up to the boundary line of the Dominion Coal Company, in the Sydney Mines areas, whereas the Dominion Coal Company on the other side of the water was approaching the areas of the Nova Scotia Steel Company, and in one case, I believe, had actually entered the area, and in addition to that, I might say that both companies held certain views as to the relative values of the properties, and it looked very much like a deadlock; it did not seem as if we were going to succeed in exchanging area, and if each adhered to its boundary lines, it would have affected the operations of the other by reducing the amount of coal naturally tributary to the openings put down. In this case, I would consider that the mines of the Nova Scotia Steel Company have a new lease of life.

By Mr. Cowan:

Q. Does the consolidation of these different companies or mines enable you to produce your coal at a cheaper rate?—A. Eventually it will do that.

Q. Is it not doing it now?—A. The consolidated company has not begun to function as yet.

Q. Coming back to your question of costs, the Americans are evidently selling at a very much lower rate at the pit mouth than you are. Can you give us a reason? Does the reason you have given, that is, the fact that you are submarine mining, in your opinion, represent the entire difference in costs between the Americans and your companies, or are there other contributory causes?—A. Some of the causes I have mentioned apply in the same way to land operations in Nova Scotia. That is, we are unable to use electricity as motive power, for instance, on the land as well as in submarine operations. Of course, we feel the need of it more in the submarine, but we also suffer by comparison when we are unable to use it in the land operations.

Q. In your mines do the men produce as much per day as they do on the American side? Can they and do they—generally speaking?—A. Generally speaking they do not. By that I do not mean to infer that the men are not as good. They are better, I believe. I think our men are better on the average than the men employed in the American mines, but they have not the same opportunity to produce.

By the Chairman:

Q. Why? Just explain that?—A. The conditions of mining are more difficult with us, generally speaking, and it is a harder proposition to take a ton of coal out of our mines than it is from the American land mines.

Q. Can you explain to the Committee why this is so?—A. To begin with, we must take the under-cutting. It is necessary for the coal to be blasted, generally speaking.

By Mr. Cowan:

Q. Is not that the usual condition?—A. That is only preliminary to the statement I am going to make. Coal has to be blasted, and when blasted it expands, and in order to make possible successful blasting it is necessary to remove a certain amount of the coal before the blast is set off. That process is known as under-cutting. The under-cutting of coal in our mines is more difficult than in the American mines, because at the face of the average American mines electricity is used as motive power to actuate the under-cutting machinery, whereas with us we use compressed air, while in some cases we use only hand-power.

Q. Is it not possible to ventilate these mines sufficiently so that you can use electricity?—A. It is not considered so.

Q. Who does the considering, your company or the Government?—A. The local Government, through its Mines Department.

By the Chairman:

Q. One who is not familiar with coal mining—A. That is the first process.

[Mr. D. H. McDougall].

Q. Will you just continue?—A. Then, certain precautions are required in our mines, and properly so I believe. Before a blast can be fired all of the material that has been removed as under-cutting has to be loaded into cars and taken away.

Q. For a considerable distance?—A. For a considerable distance, and in the process of blasting powder containing certain flame dulling regents must be used with us and a great deal of attention is paid to the direction of the holes that are drilled in the coal for blasting, a great deal more attention than is paid in the average American mine. As I was going along, I omitted to say that in many cases in the States this under-cutting process is not indulged in at all, that is, the miners are permitted to bore holes in the face of the coal and shoot it without under-cutting. That can be done, but the result is smaller coal and more dangerous operations. Because the charge in the hole follows the line of least resistance and may possibly blow out into the room; in that case if there is any gas present or any fine coal present there is danger of an explosion.

Q. Would the presence of gas in your mines make these regulations necessary? What about the difficulty of removing the coal broken down in your mines as compared with the American mines?—A. The bottom conditions of the average American mine are better. You see they have a great many seams of coal and they have carefully selected these seams which to-day can be worked most cheaply, and the question of pavement of floor from which they shovel enters into the consideration of the seam to be chosen for work, and the average floor to be shovelled from in the American mines is a cheaper floor than ours—again our mines are substantially deeper than the American mines.

By Mr. Blair:

Q. How deep are your mines?—A. Our mines are a thousand feet or more in some cases. Some of the mines in Nova Scotia are working under 2,500 feet of cover.

By Mr. Keefer:

Q. What is the average depth?—A. I have not that information at the present. I have to make a computation for you. I can furnish it if you like.

By Mr. Cowan:

Q. Some of the English mines are a good deal lower than that?—A. Some of the English mines are and some are not. Where the pressure is heavy it is sometimes necessary to attack the coal on the end of the coal rather than on the side. The ordinary method is to attack the coal on the "plane", and that is the way it works easiest but where the pressure is heavy it is sometimes necessary to turn the direction of the workings around at an angle to the easiest method of working in order to protect the roof during the process of mining, but in that case it is considerably more difficult to undercut the coal; it is more difficult to shoot the coal and it is generally more difficult to load the coal because the bottom is not so good.

By Mr. Blair:

Q. What is the nature of the roof?—A. In case of submarine mining where you have to carry the whole weight sea bottom, as well as of the strata bottom—

Q. Is it not solid rock?—A. Yes, it is solid rock, but you must bear in mind no matter what distance you are down if you permit subsidence, eventually that subsidence approximately to the same extent will reach the sea bottom.

By Mr. Cowan:

Q. Does the miner in your mines do work by contract?—A. A certain amount of the work is done by contract.

[Mr. D. H. McDougall.]

Q. Are their rates of pay higher or do they carry the cost of this more expensive operation?—A. All the problems of ventilating and extra haulage are borne entirely by the company.

Q. It does not enter into the work in your mine at all?—A. Not to the same extent. There is of course a difference in the work done by the miner.

Q. You do not know how your pay to your miners working under contract compares with the miners in the Alberta field for the same type of work?—A. I think our conditions in the case of the Nova Scotia Steel Company are so different from the Alberta mines that it would be very difficult to make a comparison except in the amount of money earned per month or per year. In the last two months our conditions have been bad but I believe that for the previous five or six years the average wages of the miners in Cape Breton mines have been higher than those of the Alberta miners per month and per year.

By Mr. Douglas:

Q. Because there is more steady employment?—A. Because there is more steady employment.

Q. And that applies to the United States, generally speaking?—A. And that applies to the United States, generally speaking.

Q. But they would not be greater if the statement of the president of the corporation was correct: that mining coal in Cape Breton was a summer operation, not a winter operation?—A. It has always been, you know, Mr. Douglas, in the past. We have always kept the mines working in the winter as well as in the summer.

Q. Until this merger loomed up?—A. It just happens to coincide.

Q. We have the president of this merger stating it is a summer operation, mining coal in that part of the country. It is the first time any responsible head connected with any of these coal companies has made any such statement as that, because the whole intention of this steel corporation was to provide steady employment, and we have the president of the corporation coming in and saying it is only a proposition for summer. It will show that the amount of wages is not as great as the other fields if we are going to have steady employment.—A. I am told in that connection that one of the expenditures under contemplation at the time by the company is in connection with a new making station to bank coal for the Dominion Coal Company at New Aberdeen. That would mean provision is being made for the storage of large quantities of coal in the future.

By Mr. Keefer:

Q. About what quantities?—A. They have had as much as 400,000 tons stored.

Q. How much per ton would that roughly add to the price of coal to handle it versus that way instead of shipping it?—A. Offhand it might be 25 cents a ton or possibly somewhat more. Somewhere in that vicinity.

By the Chairman:

Q. What is the cost of a storage plant of that capacity?—A. A great deal depends upon the type of plant. I would say that \$150,000 to \$175,000 would be a moderate expenditure for such a plant.

By Mr. Keefer:

Q. So that if the coal were banked during the time of winter with no market, should only add a cost of about 25 cents?—A. About, approximately, yes.

Q. You realize the tremendous importance of that coal question to our railway situation, don't you?—A. Yes.

Q. You know our heavy deficits?—A. Yes.

[Mr. D. H. McDougall].

Q. You know when you jumped the price of coal from \$3 to \$8, or rather that is what is asked of them, what a serious situation it is for every taxpayer in Canada? You can readily see the importance of this question. Do you know whether your company has ever taken any national viewpoint on that question? I am speaking of trying to meet the terrible situation we have in Canada to-day, in this railway question due to the high cost of coal.—A. In reply to that perhaps I might repeat an extract from the statement I made a while ago before you came in. The Nova Scotia Steel and Coal Company during the period of twenty years spent \$6,000,000 in property, mined 12,000,000 tons of coal and had a return of $3\frac{1}{4}$ per cent before making any provision for depreciation or depletion.

Q. Do you include in that the \$1.55 you are charging your own company?—A. We are charging our company between \$5 and \$6; in some cases as high as \$6.36 for the coal to the steel plant.

Q. Your company does not supply at \$1.55. You charge how much?—A. I can give you the figures.

Q. It would be interesting.—A. In 1918, we charged the steel plant \$5.97 a ton for coal; in 1919, \$6.36; in 1920, \$5.77.

Q. Give the quantities, please?

By Mr. Douglas (Cape Breton):

Q. Give us 1912?—A. I have not got 1912. I can get it for you.

Q. It is only fair if we could get 1919 and 1920 that we should have 1912, 1913 and 1914.

By Mr. Keefer:

Q. Just let me follow a point up first?—A. Approximately 250,000 tons last year.

Q. Was that cost?—A. That was in the vicinity of cost.

Q. You had a profit on it?—A. We had no profit on it.

Q. There was no profit. Then practically it was cost. It was practically cost was it not?—A. Not necessarily.

Q. Why are you asking \$3 profits on the railways?

Mr. DOUGLAS (Cape Breton): The auditor of the Nova Scotia Steel Company is here.

By Mr. Keefer:

Q. There is a difference between cost and price, is not that a fact?—A. When is this price of \$8 a ton being charged?

Q. Seven dollars in Nova Scotia, and \$8.10 in Montreal.—A. We will take the figures, \$6.36 in 1919, \$5.77 in 1920, and our price for coal to the Canadian National Railways at \$5.50 for last year.

Q. What about the present difficulty?—A. One of our contracts has two years to run yet.

Q. Why ask them the \$7?—A. We have not asked them the \$7.

By Mr. Cowan:

Q. Are you prepared to sell to the Canadian National at the price now quoted?

Mr. MCKENZIE: They are all one company now.

By Mr. Keefer:

Q. Will you let the people of Canada have that coal at that cost price plus reasonable profit?—A. The coal has been offered at \$6.50 I understand.

Q. Who has the regulating of that price, is it you or the president, or the sales agent, or who?—A. I am responsible for the regulation of the Nova Scotia prices.

(Mr. D. H. McDougall.)

Q. Is there any reason why you should not let us have your coal at a reasonable profit over cost, in order to help out this difficult situation in Canada?—A. What would you regard as a reasonable profit. It is only a question of what is a reasonable profit. If we can get any data from you about that we will concede a reasonable profit. I will be very glad to give you any data you require.

Q. Your coal question is local so far as the railways are concerned, to Nova Scotia, that is from Montreal. You cannot attempt to give us coal for the railways as against American coal?—A. I doubt very much if we can do it to-day. I believe our condition is going to improve. We were pretty badly shot to pieces by war conditions, and the whole mining district there has been badly disturbed. Ships were requisitioned—

Q. We want to impress upon you the great importance of this, not only you but the whole of Canada. You hit Canada and you hit yourself.

By Mr. McKenzie:

Q. Might I ask you, Mr. Keefer, how much are the people of Ontario willing to pay for our coal over and above American coal?

MR. KEEFER: We are paying 53 cents for duty unnecessarily.

MR. MCKENZIE: What is the measure of patriotism of the people of Ontario when it comes to dollars and cents for our coal over their own?

MR. KEEFER: We cannot get your coal within \$2 or \$3 of what we can get it in the United States. We can get it at Port Arthur much cheaper than you give it to the people in Montreal.

MR. MCKENZIE: The man who is buying coal will want the best coal he can get at the lowest possible price.

MR. KEEFER: We are not going to have our own people hold us up by the throat.

WITNESS: There is no holding up by the throat.

MR. KEEFER: It is a question of reasonable profit.

WITNESS: I think it is largely misunderstanding. I believe our story will be quite acceptable at the proper time. I think we can get together with the railway officials and that ultimately we will be able to reach a satisfactory understanding.

Q. Are your men in the meantime idle while this state of affairs is going on?—A. Just what state of affairs?

Q. I mean this difficulty of making a contract between the railways and your company?—A. I think there is some misunderstanding there too, because so far as some of our mines are concerned, at least the situation that exists to-day is not because of a failure to get together on the question of price; it is because the National Railways during the winter took very large quantities of coal and they are like other business men, when they have large quantities on hand they do not care to store any more for the present.

Q. Don't you know the miners have telegraphed up to this Committee asking for work?—A. The unemployment situation that exists to-day is not necessarily the result of a failure to get together on coal prices, so far as ourselves and the Canadian National are concerned.

By Mr. Cowan:

Q. If you had taken this contract would you not be producing?—A. During the winter the National Railways take in large quantities of coal over and above their immediate needs, and it is doubtful in my mind even if we were all agreed on prices to-morrow whether they would be immediately increasing their quantities materially.

Q. Supposing you got that contract completed by August and then start producing for the Canadian National, that will be coming in just upon the head of the big

[Mr. D. H. McDougall].

demand for domestic purposes. Does that not mean you will by reason of the fact that you are now idle, have to charge higher prices to everybody? Would it not be better to start and deliver that coal now and thus keep your mines operating steadily—A. Very much better, if it could be done.

Q. Mr. Wolvin seemed to be perfectly satisfied the other day so long as he could get it settled by August?—A. I am sure he realizes the importance of getting it settled just as soon as possible. The sooner it is settled the better.

By Mr. Keefer:

Q. We have had telegrams from the miners asking to be employed. Why is it they cannot be employed?—A. They cannot be employed because there is not any outlet for coal at the moment. The Steel works at Sydney of the Dominion Steel Company ordinarily take about a million tons of coal a year, roughly 100,000 tons a month.

By Mr. Douglas (Cape Breton):

Q. The evidence is that they are taking about 40,000 tons a month now?—A. I cannot see where they are putting it.

Q. It is in the record, it is just as well to stick to what is given?—A. The Steel works, the Nova Scotia Steel & Coal Company take about 20,000 to 25,000 tons a month from the mines. They are not taking a pound to-day.

By Mr. Keefer:

Q. The railway wanted to get coal. It wants to take 1,600,000 tons from Nova Scotia field. With that demand in sight don't you think it advisable to get the miners at work?—A. Quite so.

Q. Why are they not at work?—A. It is only within the past few days coal has begun to move by water. I doubt if the railway was in position to take much by rail.

Q. It would only add 25 cents a ton to bank it for the men to be employed. Is there any particular definite reason to give why these men who are wiring this Committee for employment cannot be employed. We would like to see them employed?—A. Supposing the management of the Dominion Coal Company, for instance, decided it had for an outlet the total requirements of the railway, and had estimated its outlet of coal in Montreal apart from the railways requirements and counted against that estimated total outlet the quantity of coal it had in bank, and its normal rate of production during the summer months. There might not be justification for employment at the present time.

Q. So you don't think these conditions justify employing the men now?—A. Quite so.

By Mr. McKenzie:

Q. You have contracts now with the National Railways have you not?—A. Yes.

Q. Extending yet how long?—A. Two years.

Q. You are ready to do your part in delivering the coal are you not?—A. Quite so.

Q. They are not taking it?—A. That is what I base my statement on.

Q. Why are they not taking your coal?—A. The contract we have with the railway for coal at Sydney Mines provides for 16,000 tons a month delivery, and they are taking at the rate of 4,400 tons.

Q. What percentage a month are they taking on what you are obliged to deliver—A. Approximately 25 per cent.

By Mr. Douglas:

Q. What is the reason for that?—A. The reason I believe is during the winter the railway laid in large quantities of coal and that at the present time they have an excess of coal.

Q. The evidence I think shows that the railways themselves have no more than the average quantity on hand?—A. They have many weeks supply in advance. Everybody knows that.

[Mr. D. H. McDougall].

Q. There is a statement in the evidence of the quantity on hand?

By Mr. Keefer:

Q. Is there anything about the method of transporting that in boats? We have had it in evidence that you wanted 50 cents a ton if the railways wanted their own ships to haul it?—A. That applies to the Dominion.

By Mr. Cowan:

Q. If you could close these contracts with the railway companies they would take immediate delivery, would they not?—A. I understand they are ready now to begin delivery by water.

Q. Coming to this banking proposal which you said cost 25 cents a ton. That includes all banking charges?—A. No, that is the physical process of laying the coal down and taking it up. I have been away from the Dominion Company for a number of years, and I am not in direct touch with their costs.

Q. Unless you are a very very wealthy corporation you would have to borrow money from the banks in order to carry on your operations—A. Yes.

Q. Are you finding any difficulty at all in getting the banks to finance you at the present time?—A. I understand the Dominion has found difficulty in financing for larger quantities of coal,—I have been so advised.

By Mr. McKenzie:

Q. It seems to be the general impression you are holding back the coal, and that the railway wants it. There is the difficulty about the proposition. You have a contract price, is that a fact?—A. The arrangement is such that there is no need for a renewal of negotiations at intervals.

Q. Automatically they are increased and decreased. I am not surprised, but it is not a contentious matter. What provisions are made under the contract? Up to the limits of your contract you say that the company is ready to deliver the coal?—A. Yes.

Q. As they may require it from you?—A. Yes.

Q. Is that a fact?—A. Yes.

Q. When the railway people want it under this contract, under the existing contract?—A. Yes.

Q. It is yet good for two years?—A. Yes.

Q. Now the slackness in the delivery of the coal is not the fault of the company?—A. It is not the fault of the company.

Q. I understand you are also prepared to deliver coal at the Acadia mines at Acadia. You are running that mine, are you not?—A. Yes.

Q. Are they taking any coal from you there?—A. Practically none, I believe. I have not been down there for some weeks, but I was advised yesterday they are taking practically no coal, but that is a different situation. There is no contract in existence there.

By Mr. Keefer:

Q. That mine comes under the jurisdiction of the merger?—A. The moment the merger begins to function it will come under it.

Q. They are operating for a fortnight?—A. They are a little slow. They have not started yet. There is one point in connection with the Sydney mines contract. The railway is not disposed to bank large quantities of that coal.

By Mr. Douglas (Cape Breton):

Q. If the coal does not bank well that is the reason it is not done.—A. That is not the only reason, because ordinarily they take the full quantity, so there must be another reason besides that.

[Mr. D. H. McDougall].

Q. The other reason is this, that it requires a certain amount of mixing with other coal?—A. No, I do not know of any cases where it has been mixed.

Q. Where does it go?—A. It is used for steaming purposes on the railway.

Q. What particular point?—A. It is passed along the line as far as they wish to send it.

Q. It is used in different places where they coal the engines with other coal?—A. Quite so.

Q. So it is mixed?—A. It is not mixed so far as I know.

Q. That contract you refer to has two years to run. That is not a definite contract as to price?—A. Yes.

Q. It is not definite to-day. You cannot tell what the price would be for a ton of coal. You would ship to them to-day under that contract?—A. I think so.

Q. It is not stated in the contract that it is \$5.50, or that it is \$6.50, is it? You could not tell by the contract itself you were going to ship coal to them at one of those figures, or any definite figure? Is it not a contract that varies, dependent on the cost of the production of the coal?—A. Not quite that. There are conditions in connection with the contract that I shall pass on to your Committee if you so request, but I am not anxious to disclose them.

Q. There has been an argument that it would be to the advantage of the railways as well as the operating company that the operating company should make long term contracts with the Canadian National Railways. There is only one long term contract with the railways at the present time, and this is the one, and it is important to see how this particular contract is working out, so that this Committee will be able to determine whether it is possible to make a recommendation in regard to long term contracts or not, so that if we have the terms of it and how it is not working out properly it will be some valuable information for the Committee I think. There are some difficulties there and we might as well have the whole story.—A. If the Committee decides I shall submit a copy of the contract, but there are certain conditions in connection with it I would rather not discuss at the present time.

Q. If it can be discussed when Mr. McDougall is recalled, let us have it, because it is a very important point.

By Mr. McKenzie:

Q. The management of the National Railways refused through the Minister to submit their contracts to us. They say we have no business to see them. They regard it as confidential between themselves. Mr. Hanna says, "You must not show this contract. Is it fair to Mr. Hanna that the other men on the other end of it shall show the contract? It is just as well for Mr. Hanna to show it.

By Mr. Keefer:

I would suggest that it be given to the Chairman to use his judgment about how far it goes.

The CHAIRMAN: No, I do not think that is advisable. We either want the information for the use of the Committee or not at all.

Mr. KEEFER: I think we should have it here. I think we should have the information before the Committee.

Mr. CHISHOLM: Is it not for the House to deal with?

Mr. KEEFER: We are a Committee of the House of Commons, and let us use our judgment.

The CHAIRMAN: It seem to me, as a personal opinion, that this raises another question as to whether investigation of prices under these contracts properly comes under the powers of this Committee. I think it is a question worth debating.

Mr. KEEFER: As far as we have got, only relating to Nova Scotia, the price seems to be a factor in the delivery.

[Mr. D. H. McDougall].

Mr. McKENZIE: I have not taken very much interest in it so far, but I wish to point out that, by reason of the fact that the management of the Railways do not want to disclose their business, a Committee of the House of Commons has been appointed to inquire into the operations of the Railway, and to ascertain what matters should be brought down to the House of Commons, and what not. These coal contracts are some of them. Mr. McDougall is a party to the contract at one end, and Mr. Hanna at the other, and Mr. Hanna says "I won't disclose it." We have a Committee inquiring into that. Is it a fair proposition to put Mr. McDougall, who is the other party to Mr. Hanna's contract, on the stand, and to say "You must tell us all about it. The House of Commons won't take that position, and the Premier won't, but you must tell it." That is not fair to Mr. McDougall.

Mr. KEEFER: You will support the Government on that proposition.

Mr. DOUGLAS: The witness has raised the question and made the statement that there is a contract outstanding for 200,000 tons from a certain colliery, being part of a group of collieries of which he has charge of the operation, that it called for delivery at the rate of 16,000 tons per month, that the Canadian National Railways for some mysterious and undisclosed reason, had only taken delivery of a very small proportion per month, with the consequence that that mine was idle, and the men were out of employment. Having raised the question, the reason for the unemployment there is due to the fact that the Canadian National Railways are not living up to the terms of their agreement, and then for the witness to say "I won't produce the agreement"—I say there is no question about it.

WITNESS: I might say in that connection that there is no question between ourselves and the Canadian National Railways, as to the price of coal under that contract. There is no discussion, or argument or difference of opinion at the present time.

By Mr. Keefer:

Q. You say the railways are at fault in not taking delivery?—A. I beg pardon, I have not said they were at fault. I merely said the coal was not being taken away. I do not know who is at fault.

The CHAIRMAN: Do you wish the Chairman to rule or do you wish to decide it in the Committee?

Mr. ROSS: You have to decide, because the witness says he can produce the contract.

Mr. COWAN: It should be put to the Committee and we should decide whether anything further should be done in regard to it.

The CHAIRMAN: That does not settle the matter.

Mr. DOUGLAS: If the witness is willing to produce it—

Mr. McKENZIE: You will have to settle it as the judge of this matter. I submit to you that this is a contract between Mr. McDougall's Company and the Railway management, the head of which is Mr. Hanna. The Minister of Railways and the Prime Minister stated in the House that it was not in the interest of the management or of the country that that contract should be brought down and laid on the table of the House. The Prime Minister moved in the House of Commons for a Committee to inquire as to which, if any of these contracts or dealings should be brought down to the House of Commons. I say that it is highly improper for a Committee appointed, not for any such purpose at all, to tell a witness to produce any of these documents.

Mr. KEEFER: I think we should leave the matter for the present, and consider it again. There is a great deal to be said on the other side, and we can consider it later on when we meet together as a Committee.

The CHAIRMAN: That postpones the decision and does not settle anything.

[Mr. D. H. McDougall].

Mr. KEEFER: We had better let it stand.

Some MEMBERS: Let it stand.

Mr. McKENZIE: As a Member for North Cape Breton and Victoria, I am very much concerned about the operations of the mine. What are the prospects of an early start at Sydney Mines, and if a start is not made, what is the cause of it?

WITNESS: I would expect within a few weeks that there will be an improvement in the position so far as the coal mine operations are concerned, but I do not expect the resumption of activities on a scale similar to last year, because this year there is no demand for steel; so that if the usual outlets were provided elsewhere, there still would remain unmined a certain amount of coal which would ordinarily go to the steel works.

By Mr. Keefer:

Q. The Province of Quebec wants fifteen million tons of coal. You could supply it by water. Why not get busy? There is a big market. They are bringing it from the United States and paying heavy transportation charges.

The CHAIRMAN: Pardon me, you said Quebec, you mean Ontario.

Mr. KEEFER: No, I mean Quebec.

The CHAIRMAN: They do not require fifteen million tons.

Mr. KEEFER: He cannot deal with Ontario, but he can with Quebec.

WITNESS: We have men experienced in the work, seeking orders for coal throughout the whole of Quebec.

By Mr. Keefer:

Q. So that there is a market there if you are prepared to accept the price? You were good enough to say a while ago that you hoped to be able to come into our Ontario market. What would enable you to do so?—A. I feel that as a result of the consolidation of the properties a greater output will be obtained from the mines in the East.

Q. That is the first thing?—A. And I expect in time there will be an improvement in the cost of producing the coal.

Q. That is the second thing?—A. Yes, and I feel that ultimately too the consumer in Ontario will be disposed to be more sympathetically inclined towards Nova Scotia coal than we believe he has been in the past.

Q. You hope to develop sympathy in Ontario. That is the third thing?—A. With the assistance of the three conditions I am looking forward to, we may be able to get coal to Ontario.

Q. In order to get that sympathy, you must reduce the price. On account of freight and so forth it is now double what they can get it from the States for?—A. I would not say double, and I believe the American coal will increase substantially in price.

Q. As it increases you will be able to do it?—A. Yes, and I expect some improvements will occur in our own situation.

Q. One important factor would be if you could increase the facilities for water borne freight, and cut the freight in half. We have heard today that it is \$2 from Lake Erie to Montreal. If you could load your coal in your ships and take it to Toronto and unload there, there would be a great reduction in price?—A. Oh yes, a great reduction.

Q. How much? \$1.50?—A. Possibly, yes.

Q. So that the importance of channels of communication by water is a very important link in this matter in future for Ontario?—A. Yes, if it were done.

Q. You would cut \$1.50 off the cost of freighting the coal there?—A. If it were done it would facilitate the movement of Nova Scotia coal, but whether it is economically feasible to do it is another problem.

[Mr. D. H. McDougall].

Q. But if it were done, that would be the result?—A. If it were done I would expect that to be the result.

Q. And it would reduce the cost of freighting \$1.50? Do you question that? At present it is \$2.25 from Lake Erie to Montreal?—A. If provision were made for deep draught boats all the way through, it certainly ought to reduce the price substantially, and possibly in the vicinity of the amount you suggest.

Q. \$1.50?—A. Yes.

By Mr. Douglas:

Q. You said that as a result of the merger you expected to decrease the cost. Tell us how?—A. The tying up in the one field of the areas of the Nova Scotia Company and the Dominion Company I think will make for improvement in the mining costs of both. Take, for instance No. 3 at Sydney Mines, I believe that we will substantially reduce the cost there. Take Dominion No. 1 mine, the Dominion Coal Company, that mine in places was worked up to the boundary lines of the Nova Scotia Coal Company. With a longer life ahead of these mines there is every justification for the expenditure of sums of money for the improvement of operations there that did not exist before, and as a consequence, costs ought to be lower.

Q. With the decrease of costs you have in anticipation—I suppose that is the main reason?—A. Yes.

Q. Does that account for the increased price that is being asked for over last year?—A. I do not look for results this year on the last. I doubt if there is any substantial increase this year over last year, so far as rail coal is concerned—we have made no quotations for coal.

By Mr. Keefer:

Q. There is a difference between \$5.60 and \$7.00 to the railways?—A. That is not the case with the Nova Scotia Coal Company on any extra coal they have to sell or with the Acadia Coal Company.

By Mr. Douglas:

Q. It is merely a case of being able to extract coal from some of the openings. Now that coal could not be extracted on account of the areas being interlocked?—A. That is so, and the fact that we will from year to year improve our conditions in getting away from the disorder which prevailed in our mines during the war period. That is particularly true of the Nova Scotia Steel Company.

Q. You do not propose to discuss the cost in production by changes in management, do you?—A. I do not know.

Mr. COWAN: You may not require it in that case.

By Mr. Douglas:

Q. Is this not the fact; that of all the constituent factors that have gone into the British Empire Steel Company, that each one of the companies is to be managed and conducted separately as before, that the British Empire Steel Company is a holding company? Is that not a fact?—A. I do not think so.

Q. What is the fact in regard to it? There is only one way you can justify a merger; that is by being able to do things more economically. If you are not going to do it more economically, if you are going to operate all the collieries as before, the Nova Scotia Coal Company, Dominion Coal Company, and Acadia Coal Company, and so on?—A. I wonder if there is not some misunderstanding on that point. It was not the intention that they should be operated independently, but that one operation should be dove-tailed into the other, wherever advantageous, and that as a result we would be able to effect substantial economy.

[Mr. D. H. McDougall].

Q. This dove-tailing is the thing we are after. The extent of the dove-tailing that has come about as a result of this merger?—A. Supposing you had one general superintendent of mining operations for Cape Breton—

Q. Employed by whom?—A. By the British Empire Steel Company. He would have control over the operations of the Sydney mines as well as the operations at Glace Bay.

Q. Is that the intention of the British Empire Steel Company, or is it the intention to run these corporations separately? The indications are that they are going to be run separately as at present, or as in the past.—A. I do not think it is the intention. I think the boards of directors of the different companies will be maintained, so far as their operations are concerned.

By Mr. Cowan:

Q. The dove-tailing would result in one of two things; it would either enable you to sell your coal for a lower price, or it would dove-tail the increase in your shareholders' profits. Which would be more likely?—A. What I had in mind was the more economical operation.

The CHAIRMAN: I think we will have to wait until this company gets into operation before we know the results.

By Mr. Cowan:

Q. Do you expect the wages in connection with mining operations generally to fall; is there any prospect of that? Are you paying the standard wages that are being paid in the United States?—A. The wages vary in different localities, not only as between the United States and Eastern Canada, but as between different localities in Canada, even in the Cape Breton mines.

By Mr. Douglas (Cape Breton):

Q. What truth is there in the statement published in the press that negotiations had been opened between the president of your company and the officials of the United Mine Workers looking to a decrease of wages of 12½ per cent?—A. I do not think it is correct.

Q. I suppose you noticed it in the press?—A. No, I have heard of it as being in the press.

Q. Can you say, so far as Nova Scotia Steel is concerned, that that would not be correct?—A. We have made no suggestions of that.

Q. That is, the organization heads have not been approached by your company with that in view?—A. Quite so, they have not so far as I know, certainly not by myself or by anybody that I have authorized.

Mr. KEEFER: Is the witness going to furnish us with the cost of mining? Is that understood?

Mr. DOUGLAS (Cape Breton): Certainly.

Mr. KEEFER: Will the witness file us a statement showing the cost of mining so that we may know the cost per ton at the pit mouth? We want to trace it along.

The CHAIRMAN: Had we not better settle this matter? This question is coming up every day. Would it not be better for the Committee to decide definitely what it is going to do with this question of mine costs so that we can use every witness in the same way, and not be continually discussing it at each session?

Mr. CHISHOLM: What did you do the other day?

Mr. KEEFER: We passed a resolution that the president furnish a statement.

The CHAIRMAN: Yesterday the matter came up for discussion, and it was proposed to take further steps. I think it was decided that we would leave it over for a decision until today.

[Mr. D. H. McDougall].

Mr. KEEFER: It was stated that Mr. McDougall would be here, and that he would be the proper man to take it up. Am I not right?

WITNESS: Yes, but the real question is as to your decision.

By Mr. Keefer:

Q. Have you any doubt about that, as to whether we are going to get that cost?—
A. Evidently there is a doubt from what I heard expressed.

The CHAIRMAN: Do not argue this with the witness.

Mr. KEEFER: We passed the resolution unanimously.

The CHAIRMAN: Does the Committee wish to stand by that resolution that we passed the other day?

Mr. KEEFER: Certainly.

Mr. DOUGLAS (Cape Breton): Wait a moment. The statement that Mr. Keefer makes as to standing by the resolution is all right, but I wish to test the Committee on this point. I move that the auditor of the Dominion Coal Company, R. Gordon, and the auditor of the Nova Scotia Steel Company, who I understand is present, be called and be required to produce the cost sheets of their respective companies for the years 1912 to date, the monthly cost sheets, in order that we may have an opportunity to examine them on the cost statements produced. As to the resolution passed the other day, it was to the effect that statements be sent in.

Mr. KEEFER: Quite right.

Mr. DOUGLAS: I think it is only proper that this Committee should have a fair opportunity of cross-examining on these statements produced, for example, in regard to depreciation, in regard to over-head. The over-head is a mighty important matter. When we find that these companies have been merged into another corporation, the over head is going to be always important, so far as the production of coal is concerned. I make that motion.

The CHAIRMAN: I think it would be necessary to reconsider the motion passed the other day.

Mr. KEEFER: In what respect?

Mr. COWAN: Does the one conflict with the other?

Mr. MCKENZIE: They are conflicting things and conflicting rules. Have you got the reference to this Committee, Mr. Chairman?

The CHAIRMAN: Yes.

Mr. KEEFER: Let us see what the conflict is between this motion and the former motion.

The CHAIRMAN: This is the original motion as passed. (reads):

“Moved by Mr. Ross, seconded by Mr. Cowan, that the coal operators called as witnesses before this Committee be obliged to furnish the Committee with detailed monthly statements from 1912 to date of the cost of production of coal per ton, showing therein all items separately entering into said cost, said statement to be verified by their auditors.”

Mr. KEEFER: What is the difference?

Mr. DOUGLAS (Cape Breton): This gives an opportunity for examination.

Mr. KEEFER: So does the other. The auditors have to verify the statements.

The CHAIRMAN: There is this difference: the motion I have read was adopted as the policy of the Committee, and if we are going to adopt a different policy I think we should reconsider that motion and lay down a different policy.

Mr. KEEFER: Let us see what the different policy is? The new motion is simply that the auditor attend here in person.

[Mr. D. H. McDougall].

Mr. COWAN: That is the only difference.

Mr. KEEFER: Let us get that clear, that the auditor should attend here in person and be cross-examined.

Mr. McKENZIE: There was no thought of that when we agreed to that motion.

The CHAIRMAN: Let us open up that question by moving that the motion be reconsidered. I think that that would be the proper method of procedure.

Mr. DOUGLAS (Cape Breton): I move that.

Mr. KEEFER: I second.

The CHAIRMAN: It is moved and seconded that we reconsider the motion passed by the Committee.

Mr. KEEFER: My reason for that is this—

The CHAIRMAN: Just a moment; the resolution was passed on April 21. Is the Committee ready for the question?

Mr. MACKENZIE: I do not think we are quite ready for the question. I think that it is hardly the business of this Committee to go into the private business of any company, and compel their auditors to come here and bring their books with them. That is the reason why I asked you what the submission is. What was submitted by the House to this Committee? We must keep within our submission. I do not think it comprehends going into the private business of this Company and compelling them to produce their books and figures. What is the reference?

The CHAIRMAN: The reference is as follows: (Reads)

"That a Special Committee composed of Messrs, Steele, Blair, Cowan, Keefer, Hocken, Douglas (Cape Breton South and Richmond) Ross, McKenzie, Chisholm and Maharg, be appointed to enquire into all such matters pertaining to the future fuel supply of Canada, with power to send for persons, papers and records, to examine witnesses under oath and to report from time to time."

Mr. MACKENZIE: That certainly does not contemplate going into a man's private office and making him produce his books and everything he holds secret as a business man. The reference is as to the fuel supply, how much coal is available, and so forth; that is its scope. There is the question of transportation, the freight question, the expense of getting fuel to its destination, and so forth; but it was never intended to have an inquisition of the character now suggested.

The CHAIRMAN: May I point out what, it seems to me, will be necessary if we go into this matter at all. I have before me a form which was used by the Federal Trade Commission of the United States when they were investigating the mine costs in that country within the last few years. It consists of a series of 116 different items, covering mining expenses, general expenses, fixed charges, selling expenses, and other expenses; capital; maintenance and reserve charges and so on. I understand that while different mines have different systems of keeping their costs, practically the system will be similar to this. That would mean going into the whole details. Now, that appears to me to create a difficulty, providing that the Committee deems it advisable to go into this matter, or deems that it has authority to go into it. It creates a difficulty which this Committee is not capable of handling, that is, if we are to go into these mine costs thoroughly. I understand that the Dominion Fuel Controllers' Association found it necessary to engage expert accountants who spent weeks and months in going into the whole matter. Now, if this Committee—I am not disparaging the ability of the members of the Committee—but we have not among ourselves men who have the time or the qualifications to go into that. It will undoubtedly require the engagement of expert accountants to go into it, because if we are to go into the matter at all we want full information, we want no guessing, and no jumping to conclusions in the matter. In addition to that, is it fair to ask one or two mine companies to produce to the public of Canada their mine costs without asking every coal company to do so. In Nova Scotia alone, I find there are 27 operating companies, according to the annual report [Mr. D. H. McDougall].

on mines issued by the Department of Public Works of that Province for 1920. I think that if we are to take up one or two companies in Nova Scotia, we should go into every company. If we take up the Nova Scotia companies, it is only fair that we should take up the Alberta companies, the New Brunswick companies, and the British Columbia companies, so as to give the people of Canada exact detailed information. If we undertake to do that, as I think we should if we enter into the matter at all, the Committee will be absolutely unable to carry on that work in the few weeks which we have at our disposal. If the Committee thinks it necessary that that should be done, I would suggest that the Committee ask the Government, as one of its recommendations, to take up the matter, appoint a commission to go into this whole matter and give them the necessary staff and authority.

Mr. KEEFER: Mr. Chairman, that last suggestion you have just made will be the outcome of this Committee's work?

Mr. DOUGLAS: Right.

Mr. KEEFER: In the meantime, we should do our work. Now, our work is to ascertain the fuel supply of Canada, and one of the important factors of the coal supply of Canada is the question of costs. To-day on account of the high cost of coal, many industries are being closed down, and this is most detrimental to the country. This, in addition to the heavy deficits we have to pay to the railways. Therefore, it is very vitally important for us to know if anybody is profiteering, and I for one intend to get at it, if I can. If this company, or any other company is profiteering in a vital necessity, the sooner the country knows it, and the sooner Parliament knows it, so that Parliament can take such steps to remedy it as they see fit, the better off we will be. We have had these companies in Nova Scotia testifying that they supplied coal in 1912, 1913, and 1914, for less than \$3 per ton. They are now asking for more than double that price. I want to find out why. One of the reasons that they have given to us has been the cost of operations and we have seen fit to unanimously pass a resolution requiring that these costs be furnished and a statement given by an auditor, and verified (which means swearing it is true)—surely to gracious if that is our principle and we are to have these people come with a statement before this Fuel Committee we ought to be allowed to ask a few questions about it, otherwise we will let these people ram something down our throats and we will have to take it willy-nilly. I think it is most absurd. If after we get these statements, we find that the Committee want to get experts in, we can so report to the House, in order to find out the cost of this coal—whether it is reasonable or unreasonable.

Mr. McDougal has appeared here as a very frank and reasonable witness and has said that his company ought to have a reasonable profit. We all concede that is so. We know what their profits are, but we do not know what the costs are, and until we find out we cannot say whether they are getting a reasonable profit or not.

Mr. COWAN: I cannot see any difference in the principle of the resolution we have already passed, and the one we are now asked to pass.

Mr. McKENZIE: Then why tinker with it?

Mr. COWAN: There is no difference.

Mr. McKENZIE: Then why not leave it alone.

Mr. COWAN: We have got a resolution providing for these statements, and in addition to that we are asking the men to come and explain them. It seems to me it would be to his own advantage to want to do it.

Mr. McKENZIE: A man can be called here as a witness, put under oath, and that statement put before him, and if necessary he can make any explanation he wants. Why change the resolution?

Mr. COWAN: Without trying to pry into the affairs of private individuals, I notice from what the Chairman has just read that over there in the "Land of the Free," where they say they have all kinds of liberties, they went into the question of costs, so I do not see why we cannot do it here.

[Mr. D. H. McDougall.]

Mr. McKENZIE: I think the authority given to that Commission is very different from ours.

Mr. COWAN: Then we had better get more authority.

Mr. ROSS: I am in favour of Mr. Keefer's idea. I think this Committee's work will amount to nothing, unless we can get the costs. We have already made up our minds once to that, and I think we should stick to our original decision.

Mr. COWAN: We can recommend later on to that effect, if we want to.

Mr. ROSS: Regarding all the other companies, I do not think they are to be considered too seriously because this company produces 85 per cent of the coal in Nova Scotia, and I think if we get the coal costs from them, we will be pretty close to an idea of what coal costs in Nova Scotia. We expect to have to get our supply from Nova Scotia for some time to come, so I am very much in favour of insisting upon a statement of costs.

The CHAIRMAN: Has any other member of the Committee anything to say?

Mr. McKENZIE: After you get that, what power have you to make anybody sell his coal except at any price he likes?

Mr. KEEFER: None, but that is what we want to find out—why we cannot have it.

Mr. McKENZIE: Then why insist?

Mr. KEEFER: Because we can make a recommendation to Parliament and say: "There is profiteering here," and then let Parliament say how it shall be handled.

Mr. COWAN: And if a company is not profiteering, it would be to their advantage to have everybody know it?

Mr. McKENZIE: Is this a preliminary inquiry with a view of prosecuting the companies? Is that the purpose?

The CHAIRMAN: I do not so understand it.

Mr. KEEFER: If there is no profiteering, that will be welcome news for a number of people, but if there is, it is time for us to find it out, and try to put a stop to it.

The CHAIRMAN: Does the Committee think that when you get these statements, which I understand—not from any of the mine operators at all, but from other sources (because I have been making a little investigation in my own way since this matter came up)—does the Committee think that you can get bundles and bundles of cost sheets containing information on—I will not say 100 points, but dozens of points? Does the Committee think these would be of any use in placing before us the actual information which we want, because this Committee does not want to put out to the public any information which will not be strictly accurate.

Mr. DOUGLAS (Cape Breton): Right.

Mr. KEEFER: We will know about that when we see the stuff.

The CHAIRMAN: In the motion which the Committee passed, we are entitled to receive it.

Mr. CHISHOLM: You will not be entitled to receive any more by the motion submitted now.

Mr. KEEFER: Only that we will be allowed to examine them on the statements.

Mr. DOUGLAS (Cape Breton): Then there is another important point—

Mr. McKENZIE: If there is one resolution already passed, why change it?

Mr. KEEFER: Because you said it was never intended to examine the witnesses and now we want to examine them.

Mr. DOUGLAS (Cape Breton): There is this difference—

Mr. BLAIR: I would recommend that Parliament give us complete authority.

Mr. DOUGLAS: May I have your ear, Mr. Chairman.

Mr. CHAIRMAN: Mr. Blair had the floor when you started to speak.

[Mr. D. H. McDougall].

Mr. McKENZIE: Certainly, we want to examine the witnesses. Supposing, Mr. Chairman, we get these statements, and you and the others go over them, and are satisfied. That is fair. But if we are not satisfied, then we can subpoena the witnesses and examine them about it.

Mr. DOUGLAS (Cape Breton): There is this important difference; that in the resolution it calls for them to prepare a statement—that means any kind of a statement. It may lack very great and important details, but under the proposal now, it is intended for them to bring their own cost sheets, and their own books, showing their own costs, and have the witnesses come at the same time in order that they may be examined upon them.

Mr. CHISHOLM: Is that the view of this Committee?

Mr. DOUGLAS (Cape Breton): There is quite a difference between “making a statement,” and “making the statement we want.”

Mr. CHISHOLM: Does this not involve a great deal of literature?

WITNESS: Miles and miles of it.

Mr. KEEFER: Wait a minute, Mr. McDougall. Do you make up your cost sheets?

WITNESS: We do.

Mr. KEEFER: Can you produce those sheets?

WITNESS: We can. But taking the cost sheet for the different collieries in Nova Scotia, you will get miles and miles of them.

Mr. KEEFER: There are no “miles and miles,” about it.

The CHAIRMAN: May I point out another practical difficulty? We have been spending practically the whole time of this Committee on the Nova Scotia situation, and while it is very important, I would like to say to the Committee that the province of Ontario is the only province which has a real fuel problem which required investigation at the present time. We have not devoted any time to that. We have only a few weeks in which to complete our whole investigation and it is important that we go into the whole matter thoroughly—it is important from the point of view of this Committee, to go into all the practical matters, such as the fuel situation in Ontario, our transportation, the substitutes for fuel, and the methods for saving fuel, all of which were outlined at the beginning of our sessions. Are we going to spend days in investigating these cost sheets which I claim none of us will know the meaning of.

Mr. KEEFER: Let us have them first, and then we can decide this question. The question of cost does affect Ontario, but not Ontario only,—all of Canada, because all Canada has to pay for the coal which the railways have to bring down there, and the whole function of this Committee will be futile without it. I would not want to be connected with it if we could not get to the bottom of it.

The CHAIRMAN: Are there any other remarks from the Committee, Mr. Douglas, will you repeat your motion?

Mr. DOUGLAS (Cape Breton): There is a motion to rescind—

The CHAIRMAN: A motion to reconsider.

Mr. DOUGLAS (Cape Breton): A motion to reconsider first.

Mr. McKENZIE: If it is a motion to reconsider it is out of order. There must be a notice. You cannot reconsider a resolution that is standing.

Mr. COWAN: I do not see why it is necessary to rescind that one; all you have to do is to pass another resolution that the auditors be present as witnesses.

Mr. McKENZIE: There is nobody objecting to that.

Mr. DOUGLAS (Cape Breton): And bring with them the original cost sheets of the company.

[Mr. D. H. McDougall].

Mr. McKENZIE: We have passed a resolution and nobody has objected to a motion to rescind, but there must be notice given if it is to be reconsidered. That is the rule, and if there are infants here who do not know it, it is not my fault.

The CHAIRMAN: If we follow out this policy, when we get the cost sheets, we can, then determine if it is necessary to have the auditors here, then I think would be the proper time to decide on the calling of them.

Mr. McKENZIE: That is what I said. I said when we get these papers, if we are not satisfied, we can call the auditors then.

The CHAIRMAN: We are changing the policy which the Committee decided the other day.

Mr. DOUGLAS (Cape Breton): Is there any objection to changing the policy?

The CHAIRMAN: I suppose a Committee, like an individual, can change its mind?

Mr. KEEFER: I move that the auditors of these coal companies do personally attend with these cost sheets mentioned in the resolution of April 21st, for the purpose of examination thereon.

Mr. DOUGLAS (Cape Breton): Would you amend that by stating "the original cost sheets"?

Mr. KEEFER: Yes.

Mr. DOUGLAS (Cape Breton): It will save them the trouble of making out new cost sheets.

Mr. McKENZIE: Does the Chairman think it necessary we should take the originals away from these companies' offices and bring them here?

Mr. KEEFER: They are only the cost sheets.

Mr. McKENZIE: I think certified copies would be equally reliable.

The CHAIRMAN: I think you had better specify those coal companies. As it is, it is very indefinite.

Mr. KEEFER: The Nova Scotia and Dominion Steel Companies.

The CHAIRMAN: Are there any others? Let us specify the coal operators.

Mr. KEEFER: Very well then, let this read: "That the auditors of all coal operators appear before the Committee—"

Mr. COWAN: I do not think we should single out any one or two companies. I think we ought to make that broad enough to cover them all.

Mr. KEEFER: "That the auditors of all the coal companies appearing before the Committee, particularly the Dominion Coal Company and the Nova Scotia Coal Company, do personally attend—"

The CHAIRMAN: Why those?

Mr. KEEFER: Because you told me to. You asked me to name some, that is the only reason I put them in.

Mr. COWAN: Why particularize? Name them all.

Mr. DOUGLAS (Cape Breton): Is this the Chairman's motion or yours, Mr. Keefer?

Mr. KEEFER: I am trying to meet the Chairman's views.

The CHAIRMAN: I hope you will not take from me my right to express an opinion on the motion.

Mr. McKENZIE: There are only two, and sometimes three who cannot express an opinion.

The CHAIRMAN: Mr. Keefer, the motion as you had it meant nothing. I asked you to specify these companies.

Mr. KEEFER: Then this will read this way: "the auditors of all the coal companies appearing before this Committee do personally attend with the original cost sheets mentioned in the resolution of April 21st, for the purpose of examination thereon."

[Mr. D. H. McDougall].

Mr. McKENZIE: I should put it this way, that if we think it proper to call the president or any officer of any of the companies, we can do so—Is it not the intention that all coal operators would produce their cost sheets? Have you a copy there of the old resolution?

Mr. COWAN: I did not understand it was the intention.

Mr. McKENZIE: I forget now.

Mr. COWAN: I would like to have some of these smaller coal companies from Nova Scotia on it.

The CHAIRMAN: The coal operators called as witnesses before this Committee are obliged to furnish them.

Mr. McKENZIE: I was more favourable to the resolution when I thought everybody was put in the same box.

Mr. COWAN: We might call them all, Mr. McKenzie. Dear knows how many we are going to call yet. I am just getting interested in Nova Scotia.
are going to call yet. I am just getting interested in Nova Scotia. It is about time somebody was getting interested down there. It seems to me you are a pretty slow bunch.

Mr. McKENZIE: We did not send for anybody.

It was moved by Mr. Keefer, seconded by Dr. Cowan.

That the auditors of all coal companies appearing before this Committee do personally attend with the original cost sheets mentioned in the resolution April 21st, for the purpose of examination thereon.

Mr. McKENZIE: I suggest before we move—what is this supposed to cover. Let us have no misunderstanding. One year?

Mr. KEEFER: The years you mentioned in the resolution, four or five years.

Mr. DOUGLAS (Cape Breton): That is why you refer to the original resolution.

Mr. KEEFER: The original shows the years.

Mr. McKENZIE: Does it show the years?

Mr. KEEFER: Yes, Mr. McKenzie.

Mr. McKENZIE: Have you the original here, Mr. Chairman.

Mr. CHAIRMAN: Yes.

Mr. McKENZIE: I just want to see what it says.

Mr. KEEFER: The original resolution on that point.

“That coal operators called as witnesses by this Committee be obliged to furnish the Committee with detailed monthly statements from 1912 to date of the cost of production of coal per ton showing therein all items separately entering into such cost, said statement to be certified by their auditors.”

Then we can see the difference between 1912, 1913 and 1914 coal when it was only \$4 a ton and now \$8 and \$9.

The CHAIRMAN: We have a programme for Ontario. We are going to adhere to that programme. All in favour of the motion make it known.

On a vote being taken five of the members declared in favour thereof; contrary, one.

The CHAIRMAN: The motion is carried. Shall we proceed with Mr. McDougall's examination. We have nine minutes before one o'clock, or are you finished with him.

Mr. COWAN: Mr. McDougall has been a very, very frank and very satisfactory witness, exceedingly so, but I would like to look over the evidence he has given to-day. Would it be possible for him to come back some other day? I don't want to ask a lot of silly questions.

[Mr. D. H. McDougall].

Mr. KEEFER: You mean in other words, he will be here to-morrow? Don't you think we have pretty much all we want to get except the question of cost out of Mr. McDougall?

Mr. DOUGLAS (Cape Breton): Mr. McDougall has a lot of statements before him. He has been making the corporation side of the case and some statements he has have not yet been produced, some statements he appears to have, so if we can finish the corporation side of the case then that would be one stage.

Mr. KEEFER: There is one point on which I want to appeal to the Chairman, and it is this: We cannot spend all our time on Nova Scotia.

Mr. DOUGLAS (Cape Breton): It is admitted that Ontario cannot get coal from Alberta.

Mr. COWAN: No, it is not admitted.

Mr. KEEFER: Let us settle the question of the witnesses. What are we going to do with the witness?

The CHAIRMAN: If you are finished with your examination we will adjourn.

Mr. COWAN: I think we had better finish with Mr. McDougall.

The CHAIRMAN: Anything further to ask him?

Mr. ROSS: I move we adjourn.

The CHAIRMAN: The Committee is adjourned.

Mr. DOUGLAS: Wait a minute; the statement is not finished.

Mr. MCKENZIE: We had better finish.

WITNESS: I have nothing more to submit.

The CHAIRMAN: Mr. Ross moved for an adjournment of the Committee. It is almost one o'clock. We have been sitting here since ten o'clock. I think we must endeavour to expedite the business of the Committee. Will you withdraw your motion?

Mr. ROSS: Yes.

The CHAIRMAN: Is it very very important to get away to-day. Those gentlemen seem to think they would like to ask some other questions.

WITNESS: It would be more convenient to come back at some other date.

By Mr. Keefer:

Q. You would have to come back from where?—A. New Glasgow is my home. Just before we close, there has been some question about prices that are being charged for coal and I suggested a while ago that there had been a misunderstanding. In order to make our situation just a little bit clearer, I might say we have charged our steel works at Sydney Mines a higher price for coal than we have been charging the Canadian National Railways in the last three years. I have only been three years with that company and I know positively since I came with them that that is the case.

By Mr. Douglas (Cape Breton):

Q. What is the reason for that? Why did you do that?—A. In one case we charged the Canadian National Railways less than cost.

Q. Did you charge yourselves less than cost, or more than cost?—A. At cost, minus certain overhead.

Q. At that time before you were merged you thought the railways should really receive the best consideration?—A. The very best we could give them.

Q. I hope you will think so after you are merged?—A. We have always thought so.

The CHAIRMAN: We will adjourn to 10.30 to-morrow when we will have Mr. Harrington, the late Fuel Controller of Ontario, and some of the retail coal dealers present.

The Committee adjourned until 10.30 a.m. Wednesday, April 27th.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

April 27, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: I think, gentlemen, we had better proceed. We will call this morning, Mr. H. A. Harrington of Toronto.

HENRY A. HARRINGTON called, sworn, and examined.

By the Chairman:

Q. Mr. Harrington, you have been the Fuel Controller of the Province of Ontario?

—A. I have, yes.

Q. You are not now, I understand?—A. No.

Q. When did you cease that occupation?—A. On April ninth, this year.

Q. For what term were you the controller?—A. For about a year and three months.

Q. Were you connected with the coal industry in any way prior to that?—A. I was secretary of the Retail Coal Dealers' Association for five years.

Q. Had you been a coal dealer?—A. No.

Q. If you have a statement, Mr. Harrington, which you have prepared, the committee will be glad to hear that statement now.—A. I will say, Mr. Chairman and gentlemen of the committee, that in a matter of such importance to the safety and comfort of the people of Ontario, I considered it better to have a concrete statement. As you are aware, the province of Ontario is adversely situated. We are absolutely dependent upon the United States; there is no getting away from it, and it is for that reason that I have prepared this statement, and any matters arising out of it I will be glad to more fully go into. In no other province of the Dominion is the fuel supply problem so serious as in the province of Ontario. To ensure the safety and comfort of our people during the spring, fall, and winter seasons, approximately 3,000,000 tons of anthracite are required. To ensure continued activity of our industries, approximately 3,000,000 tons of bituminous coal are required. In the manufacture of gas 300,000 tons of bituminous coal are required. For the manufacture of electricity we require 75,000 tons of bituminous coal. For operating our steam railroads, we require 6,000,000 tons of bituminous. In the manufacture of coke for industrial purposes 500,000 tons of bituminous coal are required. To summarize, we require 3,000,000 tons of anthracite for our houses, and 10,000,000 tons of bituminous coal for our industries and adjuncts thereto. For this great quantity of fuel, we are wholly dependent upon coal mines in the United States. It is evident that any difficulties arising at the mines or transportation embargoes, serve to retard and at times entirely cut off our coal supplies. Dealing with the problem as it presents itself to-day, the securing of an adequate supply of anthracite coal is entirely in the hands of the people. If any suffering arises from lack of fuel during the coming winter, the onus will be upon the people, as notwithstanding repeated warnings and past experiences, they are not taking advantage of present temporary conditions of plenty, to secure their supplies, but put off purchasing in anticipation of a reduction in price, which they imagine will follow a supposed reduction in miners' wages, a reduction in freight rates or a recurrence of the subnormal winter we have just experienced. From my experience I feel assured that for some time to come prices will not be materially changed. As to reduction of miners' wages, this

is impossible during the present coal year as the schedule agreed upon does not expire until March 31st, 1922, and that any proposed reduction thereafter will be contested is evident from the significant statement of President Lewis of the United Mine Workers, who says, "I want to go on record as saying that any attempt to reduce the wages of the miners is not only uncalled for, but is indefensible and will be resisted by our organization. The United Mine Workers has said from the first that it would not permit wage reduction in view of the fact that the great majority of mine workers are not making any more than a living wage as it is." Now, we can gather from that, gentlemen, what that means.

There is little likelihood of transportation charges being reduced, as the carriers claim that present tariffs do not return sufficient revenue to meet requirements, even in normal operations, and in consequence, drastic reductions in numbers of employees are being made. There are now 175,000 open top cars idle on sidings in the United States, a large percentage being in a very depreciated condition, and little or no effort being made at repairs. When the demand comes which it shortly will, for this equipment, a serious shortage will develop; the usual restrictive orders will be issued by the United States Interstate Commission, resulting in a panicky rush of buyers, a jump in the price of coal, buying here, there and everywhere, in fact a repetition of all our former experiences and the danger to the consumer, consequent to importations of impure coal, purchased by inexperienced dealers. We must remember that the production of anthracite coal, is confined to a limited area, about 484 square miles in the north eastern part of Pennsylvania, 265 miles from Buffalo, entering Ontario through the Niagara gateway. Through this gateway flows approximately 90% of our anthracite supplies, and any interruption of this flow means scarcity, with its attendant sufferings. The highest production reached in anthracite was in 1917, when approximately 100,000,000 tons were mined. Since then production has steadily decreased, and will continue so to do, consequent to increasing difficulties in mining operations. It has been estimated that in 50 years, production of anthracite will have ceased. The tonnage of anthracite now being mined is barely sufficient to meet the demands of the United States consumers, and were it not for the great strides made in the production of coke, also gas both natural and manufactured, anthracite coal, excepting as a distinctive expensive luxury, would be a commodity of the past in Ontario. It is evident that the people of the United States give heed to the warnings, they have received, and it will be found that when anthracite production ceases, its use in the United States will have been forgotten. The production of by-product coke has increased in the United States to such an extent that there are now produced annually about 30,000,000 tons of domestic coke, sufficient to replace the anthracite requirements of Ontario for ten years, and yet, notwithstanding the serious recommendations of Mr. C. A. Magrath, former Fuel Controller for Canada, but little attention has been given by Canadian capitalists to the installation of by-product plants. They point out and I must admit, with reason, that the people are not prepared to accept coke as a substitute for anthracite. During the fall of 1916, I warned the people of Ontario of impending rigours of winter, urging them to secure immediately their fuel supplies. The warning was received with apathy, and the inevitable result followed. A very severe winter was experienced; transportation difficulties accumulated and the struggle was strenuous to such an extent that at one period Mr. Jas. Clarke, of the Railway Board of Canada, stationed at Toronto, worked uninterruptedly with me for five successive days and nights, and with the ever ready assistance of Sir Henry L. Drayton, then Chairman of the Railway Board, succeeded in saving the situation.

By Mr. Ross:

Q. What year was that?—A. That was the winter of 1916-17. I guess you have reason to remember that. It was a strenuous time, 1916-17—a terrible winter. It was [Mr. Henry A. Harrington.]

during the fall of 1916 and extending into 1917. Pardon me for digressing, but in order to confirm that, Mr. Magrath was appointed Fuel Controller in 1917 and it was prior to his appointment that this occurred; in fact it was one of the events that led up to his appointment. But as soon as summers' balmy days arrived, all thoughts of the severe winter just passed through were forgotten, and the same programme was gone through during the succeeding winter. It is evident that had not an experienced hand directed the way through these difficulties, severe sufferings with fatal results, in many instances, would have been encountered. Irrespective of the potential supply of anthracite, we must realize that the duration of shipments into Ontario is limited. Production is decreasing, population increasing and in ten years a marked decrease in exports of anthracite into Canada will be apparent; we have but to glance at the distribution of anthracite coal to realize our position:—

Middle States.....	58.0
New England States.....	15.5
South Atlantic and Southern.....	2.4
North Central States.....	11.8
Railroad fuel.....	7.0
Canada.....	4.4

So, while the United States has established in Canada a trade base of 4,500,000 tons of anthracite valued at about \$32,000,000, and a railroad revenue of over \$16,000,000, yet, all these, must be sacrificed in securing the safety and comfort of her people. The present population of the State of New York is about 10,000,000, showing an increase of 3.5 in two years, which continued through a period of ten years, will show an increase of nearly 2,000,000 people, requiring an increased supply of anthracite, equivalent to Ontario's requirements. Pennsylvania, New Jersey, Illinois and the New England States are increasing rapidly in population, and the people of Ontario must be made alive to the fact that "self preservation" is nature's great law, and the sooner they begin the manufacture and use of the necessary preservative the better.

It must further be noted that about 25% of the anthracite is produced from independent mines, as distinct from line companies. Independent companies are working mines, which were abandoned by the Line Companies, as being unprofitable. These mines carry the thinnest veins, most faulty ground, smallest areas, oldest workings and are attended by the most difficult mining conditions in the anthracite regions. These lands are being gradually exhausted, and in a short time will have to be abandoned, as mining obstacles are becoming insurmountable. Thus in a short time a now 20,000,000 ton production will have diminished to nothing. Lake shipments to the Northwest are of utmost importance, and receive first consideration from the operator, as the period of lake navigation is limited. Fort William and Port Arthur require for local and western distribution about 2,500,000 tons of bituminous and 500,000 tons of anthracite. There are to-day on hand on the local docks 90,000 tons of bituminous and 20,000 tons of anthracite. Sault Ste. Marie, Ontario, requires about 35,000 tons of anthracite and 1,100,000 tons of bituminous; there are on hand on docks about 6,300 tons of anthracite and 7,935 tons of bituminous. As there is no guarantee that subnormal weather conditions will admit of extended lake shipments, it is easy to understand why an uninterrupted flow of coal should go up the lakes, particularly when we note that the majority of the docks in the great distributing ports of Duluth—Superior are practically bare, and require about 9,000,000 tons of bituminous and 1,800,000 tons of anthracite. Coal cargoes are imperative, as the boats coming eastward, with ore and grain must have return cargoes of coal, or go up light, which would undoubtedly increase grain and ore tariffs; in consequence, anthracite will go up the lakes until the last. In my opinion, recourse to Canadian mined coals will not, from an economic standpoint, afford any material relief in Ontario. The great objective of all governments to-day is reduction in the high cost of essential commodities, and in respect to coal,

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Ontario, particularly its great centres of commercial activity and population, is at a serious disadvantage in respect to home coal, consequent to its great distances from the eastern and western fields of production.

To bring western coal into Ontario involves on the one hand a rail haul of nearly 2,000 miles, entailing a large expenditure in freight charges, approximately \$20 per ton admitting of little or no reduction as the cars would return empty; to this must be added the great degradation consequent to the long haul, and causing a large increase in overhead charges to be passed on to the consumer. It may be advanced that coal could be brought to Fort William and Port Arthur and transshipped by water. The loss by degradation would be far more serious as breaking bulk at the lake heads and again at destined Ontario ports, reloading into cars, carriage to destination, and there unloading coupled with the depreciation, to which western coal is subjected by atmospheric conditions would all tend to render this method economically impracticable. Ontario's anthracite fuel supply, therefore, is a problem of most serious importance, becoming more serious every day, and in my opinion, the solution is in our hands here at home. I have already suggested, in fact, do strongly advocate the use of coke. We must not lose sight of a valuable substitute scattered in large quantities throughout our province—I refer to peat. The many experiments carried on, so far, have been barren of satisfactory results, and while the efforts of those engaged are highly commendable, the required object has not been achieved. Under the present process dehydration of peat is carried on but ninety days of the year; the product is a mass, containing in some instances 40 per cent water, and useless as a domestic fuel. Its shipment is attended by surprising degradation, and if to be used at all, especially as a domestic fuel, must be stored where dampness, atmospheric or otherwise cannot reach it; it is similar in every respect to a dry sponge, absorbing every particle of water available. Peat however, becomes a most valuable substitute when carbonized. A process has been perfected by Mr. Jas. Graham of Toronto, whereby 75 per cent dehydration is effected through the initial or pressure stage, and 25 per cent through subsequent heat applications. It is then briquetted and carbonized; it is then ready for consumption and shows 90 per cent heating properties of anthracite. In the Graham process, the entire peat bog may be utilized, whereas under the present process the centres of all large bogs and containing the heaviest deposits cannot, in consequence of their "punky" state be utilized. By the Graham process, continuous production is maintained throughout the year. Another method might be adopted, whereby great assistance would be afforded in the conservation of anthracite, particularly in the cities and towns along our lake fronts and in the northwest sections of the province. The electrification of one of the units of government-owned lines.—As hydro electric development has not yet reached a stage equal to the demand for electric power, required to operate this unit, as series of plants for the manufacture and distribution of electricity could be stationed along the line, and so equipped that sufficient electricity be generated to admit of a surplus being distributed to the homes in contiguous towns, providing sufficient heat during the fall and spring months, and also a source of revenue towards the maintenance of the plants. It may be advanced that under existing financial circumstances, the cost would be prohibitive. Permit me to submit that any financial cost, however great, is in considerable and highly warranted when the safety and comfort of the people are in the balance.

Bituminous coal.—As before stated, Ontario's requirements of bituminous coal are 10,000,000 tons per annum, with a present value of about \$25,000,000, and a freight revenue to United States roads of about \$25,000,000. The long hauls between Canadian mines and Ontario's industrial centre leave no room for argument from an economic standpoint, when compared with the short haul from United States mines. To patronize home mines means payment of higher prices at the mines, higher freight rates and greatly increased difficulties in securing coal when most required in the winter season. Owing to congestion Ontario's industries have

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restricted storage capacity; it is, therefore, evident that Ontario must continue to rely upon United States for bituminous coal, if our industries are to be continued on a basis of competitive activity, and advances made in our endeavours to reduce the high cost of production. At a later day when the development of electric energy has reached a position of supplying sufficient power to turn the wheels of our industries, it will be safe to cut down our importations of bituminous coal, but until then, and not until then, may we hazard recourse to native coals, This must in nowise be construed as disparagement of our home product. There is ample room for development in and around the coal producing provinces and I am satisfied repetitions of the drastic lessons received will result in greater reliance being placed upon our mines by those provinces immediately adjacent to our home mines. I have refrained quoting statistics, they being available in accurate form at the various departments of the Federal Government, and doubtless are now in the hands of your committee. The serious shortages occurring during the war and subsequent thereto, and which are liable to recur, serve to emphasize the imperative necessity of a Dominion Fuel Controller, as it was only through our then Fuel Representative, Mr. C. A. Magrath, would the United States authorities deal during those serious times of shortage. Just so long as exchange is against us, now 13% and coal \$16.00 to \$19.00 per ton, for anthracite, an abnormal situation exists, and a crisis liable to arise at any moment. The Fuel Representative or as he is termed, Fuel Controller should be permanent, or so long as abnormal conditions exist, and should be stationed, where his services would be immediately available when required. Shutting off our supplies by reason of mining or transportation trouble creates a serious situation, requiring a strong experienced controlling hand, if panic is to be prevented. It is well known that the great argument we have when our fuel imports are endangered is the trade base established in Canada by the United States, and any disturbance of this trade base, particularly of bituminous coal, is liable, in these times, to be attended by serious consequences, on occasions of shortage due to the causes before set forth. I am impelled by sentiments of sincere gratitude to compliment the Government in its choice of Mr. M. M. Mahoney, as Secretary of the Canadian War Mission, at Washington, and its wisdom in continuing him in that important office.

The WITNESS: I have found that Mr. Mahoney, like myself, is an official of the past?

By Mr. Ross:

Q. Is what?—A. An official of the past. The highly efficient and eminently successful services he has rendered the people of Ontario during the many serious emergencies, which arose from time to time, have been great factors in securing relief and avoiding suffering and distress as also interruption of our industrial activity. In conclusion, permit me to present, considering my long experience in the distribution of coal in Ontario, my knowledge of the fact that during these perilous times of return, to normal and progressive conditions, an abnormal situation exists, and to the dangers of the impending crisis, our people have become apathetic by reason of a subnormal Winter, and supposedly inexhaustible supply of anthracite, the critical condition in which I feel Ontario will assuredly be placed, that the situation is one of extreme urgency, and commending itself as such to you requires your immediate consideration and prompt action, if our people are to be protected against themselves, and their safety and comfort ensured. With your permission, Mr. Chairman, I would like to make a few recommendations.

Mr. HARRINGTON: The immediate inauguration of an extensive and detailed survey by competent experienced investigators, under the direction and supervision of the Federal Government or its appointee, of the fuel resources of the Dominion, and a detailed investigation of methods that may be best employed in utilizing these resources. A strong consistent and persistent educational campaign in the conservation

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of anthracite coal by the use of recommended substitutes. A forceful recommendation to Provincial Governments that they cause every effort to be put forth in the development of their respective natural fuel resources. That you recommend to the Federal Government the giving of every possible assistance to approved interests, desirous of erecting and operating by-product plants. That you cause an immediate investigation to be made into the methods of carbonizing peat, and if found satisfactory, you recommend to the Federal Government the necessity of financial assistance in developing and making available for public use, the fuel obtained. That you recommend consideration be given by the Federal Government to the electrification of a unit of the Government lines, having in view resultant increase in traffic, and utilization of surplus energy to heat homes along and contiguous to the line, thus conserving anthracite coal in the favourably affected districts, and permitting distribution of coal thus conserved to districts requiring same.

By Mr. Ross:

Q. Will you enlarge on that recommendation? I cannot quite follow it. What does that mean?—A. It means that it will take every one of the lines, the Grand Trunk, the Canadian National, and the Canadian Northern, we will say running from Montreal to Toronto—we have not the power at the present time, hydro development, water-power, sufficient to electrify that line. Why not install plants along that line to generate electricity sufficient to operate them, the same as they do at Port Huron, and have your equipment of sufficient power to perform the service, by developing a plant along the line, which would serve during the fall and spring months—in fact during the whole time, for that matter, and thereby conserving the anthracite coal which these people would otherwise be required to burn.

Q. And would generate electricity with soft coal?—A. By soft coal—by steam. It would take no more soft coal, perhaps not as much, to electrify the line and carry out the idea I have than to operate the line itself, and would naturally do away with the dust and dirt. You know, gentlemen, what that will mean: people will flock to your railroads.

Q. People will not use anthracite?—A. Pardon me, there I must take issue with you.

Q. You could not heat homes with electricity?—A. I was speaking of a saving in the anthracite supply. I have cut down the use of anthracite coal in my own home by a ton and a half by the use of an electric heater in the fall and spring.

Q. Is it not more expensive?—A. No, I have found out that it does not cost me any more nor as much.

By the Chairman:

Q. It is only the initial capital expenditure.—A. That is it.

By Mr. Cowan:

Q. Are there no other powers that could be developed in this district?—A. I doubt it. I do not think so.

Q. The electricity can be transmitted long distances?—A. I know, but there is not sufficient development at the present time to take care of our developments that way.

By Mr. Maharg:

Q. Do you not think you could substitute bituminous coal entirely for the anthracite in the heating of homes?—A. Unfortunately we cannot. Houses are not built the same as they are in the United States. The use of bituminous coal in the heating appliances of to-day, excepting in the hands of an experienced person is attended with a great deal of danger on account of pocket gas. The people do not know how to handle it, and there is a liability to be an explosion.

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By Mr. Cowan:

Q. That is a mere matter of education. I do not know of any furnace in which you could not burn bituminous coal.—A. What I mean is that it cannot be burned in the same way as anthracite. There is an attendant danger to it, and there is dirt and soot, and all those things which go with it. Our furnaces are not yet perfected to the point whereby the soot and smoke will be taken care of. Of course, from the Pocahontas region in the United States we have smokeless bituminous coal, but as far as the homes are concerned, you cannot term it smokeless, because it is burned in small quantities, whereas if it is burned in a large boiler room it is forced out. It is like loading a piece of paper, and punching a hole in it and setting fire to the top of it, but when burned in large quantities, it is consumed before it has an opportunity to escape, and it therefore gets the name of smokeless coal.

Q. I do not know how it compares with the bituminous coal from the United States, but our western coal can be burned in any furnace that was manufactured. You have to be careful, of course, but every person has to be that.—A. As you have correctly stated, it is a matter of education, and that is where the educational campaign will come in.

Q. The people of Ontario are subject to education?—A. Absolutely, or what would be the use of recommending it?

Q. We have found that out,—I suppose you ought to be permitted to conclude before I say anything—but take the evidence that we have here for the last few days, showing that the Alberta and Manitoba Governments have gone into the question of the soft coal from Alberta, and have practically displaced the Canadian anthracite there, or largely so, purely through the process of education in a year and a half. Why is it not possible to do the same thing in Ontario?—A. Efforts have been made, but I want to say that there is really no comparison between Manitoba and Ontario and for this reason, it is precisely the same as bringing one child up on milk and another on malt. Ontario has always been fed on anthracite, they look for it, and in fact they demand it as their right. I will tell you how that is. During the whole period from 1832 up to the present time, the province of Ontario has been a market for the anthracite coal, consequently the anthracite operators have been receiving an increase in price for their Ontario shipments. The Ontario people are looking upon it as their right, and as long as the name anthracite is mentioned, Ontario wants its proportion. That was one of the principal difficulties I experienced during my term of Fuel Controller. I was continually asked by people as to why, being Fuel Controller, I would not compel the D.L. & W., or the D. & N.H., to send over the coal; that they had promised to give them the coal, and they asked me why I did not get after the operators, and why I did not force them to come at once from their price of \$18 a ton down to about \$8. Ontario is decidedly an anthracite market, and they will not want soft coal unless some effort is made as it was in Manitoba to educate the people that a continuous supply of anthracite would be practically an impossibility. They want that coal; they have got to have it. I admit, during my period of administration, during the severe winter, when people came to me and wanted a ton of anthracite coal I said "I can give you a ton of soft coal, will that do?", and they would say "Well, my next door neighbour got three tons of anthracite coal a week ago, and I want it." That is where education will have to come in, because human nature is a hard thing to overcome.

By the Chairman:

Q. Will you now continue with your recommendation?

Mr. HARRINGTON: That you recommend the provisions of Chapter 66, Laws of Canada, 1920, appointing a Fuel Controller for Canada, be continued, until suspended by Royal Proclamation. That as the Board of Railway Commissioners for Canada, as Fuel Controller for Canada, are, in the exercise of their duties, as a Railway Board,

[Mr. Henry A. Harrington.]

very frequently removed to distant parts of the Dominion, and are liable to be so removed, when an emergency in the coal situation arises, you recommend that Chapter 66, Laws of Canada, 1920, designating the Board of Railway Commissioners for Canada, Fuel Controller for Canada, be amended, so as to authorize the appointment by the Governor-general-in-Council of a Fuel Controller for Canada, whose entire time or that of his deputy, shall be devoted to such careful supervision of the importation and distribution of coal, particularly anthracite, as the ensuring of the safety and comfort of the people, and the uninterrupted activities of our industries may require, and co-operating with your committee, in the investigations and educational campaigns you may cause to be instituted. That your committee will ask the Nova Scotia operators to say what is the chief impediment to the shipment of their coal to points in Ontario, within a reasonable radius of their inland distributing stations. If it is shown that present rail tariffs from the inland distributing stations to points in Ontario, east of Belleville, are prohibitive, that your committee do appoint a committee consisting of representatives of the operators, representatives of the carriers serving the industries within that section of the Province of Ontario, lying between Belleville and the border line between Ontario and Quebec, one expert in distribution from each province, Ontario and Quebec, and a member of your committee as Chairman to go thoroughly into the present tariffs, and to agree upon such revision thereof, as may establish a satisfactory competitive basis with the charges of foreign carriers, and without endangering the earning power of our carriers, regard being had however to the increased volume of business that may result from such revision, when approved by the Board of Railway Commissioners for Canada. That in order to determine the relative burning qualities of Nova Scotia coal and American coal, and to establish same to satisfaction of your committee, that you do appoint three experts in the practical use of these coals to make a thorough investigation by practical demonstrations of these qualities, and report their findings to your committee. A notable instance of the value of Fuel Control was experienced during November and part of December 1919. Bituminous miners in the United States to the number of 400,000 suspended work consequent to wage disputes. Federal control of prices and distribution were revived and an embargo placed against all exports. Mr. Magrath had relinquished the office of Fuel Controller sometime previous, and the Provincial Fuel Administrators, with the exception of Ontario, had done likewise. When the embargo was officially declared, I immediately took over the entire supply of bituminous coal within my provincial jurisdiction and enjoined all transportation companies from moving a ton of bituminous coal without my permission. I was thus enabled with a staff of competent inspectors to maintain an equitable distribution of the fuel at my command, until Mr. Magrath, who had been hurriedly summoned and dispatched to Washington succeeded in securing relief in the nick of time. In connection with this serious emergency, I submit for your careful consideration that while thousands of industries, throughout the United States, closed down for want of fuel, not one industry in the Province of Ontario suspended operations through lack of coal, and I feel you will agree that had Ontario followed the example of her sister provinces in abolishing her fuel office, a different story would be told today.

I think, gentlemen, that those of you who are conversant with the coal situation in Ontario or were conversant during that critical period know the circumstances attending it as well as I do. We had a strenuous time. We had approximately 175,000 tons of bituminous coal stored throughout the various points. Here is where Mr. Mahoney's good work came in. For two weeks prior to the going out of the miners, I was aware of it; I knew what was going on; and I got my men ready. I had them situated at various points. As soon as the embargo was declared—I got the word at three o'clock that afternoon, and the advertisement was in the evening papers—and I took over immediately the supply of all anthracite and enjoined all the carriers from taking coal from one point to another in Ontario without my permission. The follow-

[Mr. Henry A. Harrington.]

ing morning the newspapers had it; the mayors were notified by telegraph all over the province, and we took a firm hold all over the province. The result was that in Ontario not one industry closed down for want of fuel.

By Mr. Cowan:

Q. I quite believe all that, I believe every word you have said. I have reason to believe it is all correct. Evidently the office of the fuel administration has been of very great value to the province of Ontario?—A. Absolutely.

Q. Has the office been terminated, or have you just ceased connection with it?—A. The office has been terminated.

Q. For God's sake what has the Government been doing?—A. I wish you were able to answer that question for me, doctor.

Q. Have they not had the money to keep it up?—A. They might, and might not.

Q. I do not want you to express an opinion, but if education, as you say, is necessary down there, and with the good results which they have had, I would say that the proper thing to do would be to get the Ontario Government to continue that office.—A. Every effort was put forth to do that.

Q. What reason did they give you for abolishing it?—A. Economic reasons.

Q. Economic reasons?—A. Yes. They claimed there was plenty of coal and that the past season we had there would seem to be indicative of future seasons, and they did not want to continue it.

Q. Do they think it economical in Ontario to allow people to freeze to death?—A. I do not know.

Mr. Ross: I would like to get into the practical nature of the use of bituminous coal in the homes of Ontario—

The CHAIRMAN: Mr. Ross, I do not like to interrupt you, but I suggested to Mr. Harrington before we started that it might be better to clean up the anthracite situation first and then take up the bituminous situation so as not to get the two mixed up.

Mr. Ross: I was trying to clear up the anthracite situation by substituting the bituminous. However, it is all right. Do it any way you like.

By the Chairman:

Q. May I ask Mr. Harrington some preliminary questions? I do not wish to intrude my questions before any members of the committee. I am quite willing to hold this over—

Mr. COWAN: Go ahead, Mr. Chairman.

By the Chairman:

Q. How were you appointed Fuel Controller?—A. Originally I was appointed by Mr. Magrath as assistant to Mr. Harris, who was then honorary fuel representative.

Q. How was the office maintained financially?—A. Well, now to start with—at that time the Federal Government took care of all the expenses. When they found the situation was becoming very acute, it was determined to throw the onus of expenditures upon the Provincial Government, and Mr. Magrath issued his rules and regulations whereby it was mandatory, or rather obligatory on the part of the Provincial Government to appoint a Fuel Administrator, to take the work of that province upon his shoulders and relieve Mr. Magrath of it, inasmuch as he was acting in an advisory capacity and helping in International matters. It was then deemed expedient to issue what they called "permits" to the coal dealers. It had two objects; the first was to keep the coal dealers within reasonable bounds. We found from past experience that there were some parts of Ontario that were not getting coal, and they would quietly send into another part of Ontario where coal was coming in and by the usual methods coal would be diverted and sent in to relieve their situation.

[Mr. Henry A. Harrington.]

Q. Tell us how the expenses of the office were met?—A. I am coming to that. I have just mentioned the first one. The second one was to secure revenue to maintain the office, and a system of fees was adopted, ranging from \$10 to \$100 according to the tonnage handled by the Ontario dealers. That was all put into a fund and handed to the provincial treasurer of the province.

Q. What dealers paid these fees?—A. The coal dealers; wholesalers, retailers; and the importers paid a fee to the Federal Government for the support of Mr. Magrath's office.

By Mr. Ross:

Q. Who paid that?—A. The importers.

By the Chairman:

Q. Were there any complaints about the payment of these fees?—A. Not that I know of.

Q. What would be the appropriate amount of revenue through the office?—A. For the province of Ontario, at the reduced fee which I inaugurated, the revenue would be about twenty-six thousand dollars.

Q. What authority were you clothed in, as Fuel Controller?—A. Full supervision over the distribution of coal in the provinces, and authority to collect and compile statistics.

Q. Can you specify some phase of your authority which you exercised?—A. The particular phase at the beginning was the control of the price, which was very essential. It was found that in consequence of the different prices which were being paid for coal at the mines, it was practically impossible to fix a definite price for any one locality. Now, take for instance in the city of Toronto: We might have four dealers out of the fifty-two who are getting what they call "line coal," or "company coal," as it really is termed, and the other dealers were buying from independent sources. Now, gentlemen, as you know and as I have explained to you, the independent mines work at a great disadvantage as compared with company mines, and consequently are attended with greater expense, and they have been allowed by the Fuel Administrator of the United States a differential of 75 cents per ton, but that was under the fuel administration of the United States. When that 75 cents per ton was abandoned, and no attention paid to it, the coal went up to any price that could be obtained. Now, inasmuch as they are paying a greater price for their coal than for company coal, you can readily understand it was impossible to fix a price at which coal could be sold, and we allowed competition to take care of that.

By Mr. Ross:

Q. You are, of course, speaking about anthracite all the time?—A. All the time. What we did was this: we fixed the profit that the retail coal dealer would be permitted to make over and above his overhead charged, at 50 cents per ton, and that is where our chief work came in, to supervise that to see that that was not exceeded, and during all of my experience I had but one case where the evidence was conclusive that that price had been exceeded. I gave the man a warning and I had no more trouble.

By the Chairman:

Q. What about your authority to divert coal from one section to another where it was more urgently needed?—A. That, of course, was done at the time I mentioned, when the crisis came, but I had the authority, and where it was necessary, I exercised it, but before I exercised any such authority, I caused an investigation to be made at that point, and if I found the coal was really needed there, why then I immediately arranged to have it sent, but it was all done in an amicable way; I never exercised the authority with a club.

[Mr. Henry A. Harrington.]

Q. In brief, you had full authority to handle the coal situation?—A. Absolutely, if I cared to exercise it.

Q. You made a study, did you, of the sources of supply in the United States?—A. Fairly well, yes.

Q. What situation did you find there, and what is the situation to-day?—A. Well, the situation there to-day is one the outcome of which even the most expert miners, from what I could gather, are unable to accurately determine. We have on the one hand the adverse reflection of the bituminous strike in England. Perhaps I may go back there a little. If you will remember that at the time the bituminous miners in England brought forward their celebrated demands, there was not a murmur here from the miners in the United States, I pointed that out to Mr. Mahoney, in an interview I had with him, but he did not agree with me, but at the end of ten days, he wired me and said "You are correct", because in precisely ten days exactly the same demands were made by the United States miners. It was the same, word for word. There was no difference. This shows the connection between the two. The only thing that is avoiding trouble at the mines to-day is lack of demand. Nothing else. You know we have a great decrease in commercial activities; the mills are working only at forty per cent capacity, and that requires only about forty per cent of their cars, leaving them idle upon the sidings. The mines are naturally cut off to forty per cent, and their cars and lying idle on the sidings, and accumulating. The miners see these cars lying idle, and they are only working one or two days a week—this is in both fields, in the anthracite field the accumulation of steam sizes is extraordinary—

By Mr. Ross:

Q. What does that mean?—A. Those are the sizes below the pea coal. Steam sizes form twenty-five per cent of the production of the mines. When you hear of a hundred million tons production of coal at the mines, you must first take away from that twenty-five per cent as representing steam sizes. You must then deduct from that about 10.8 per cent for colliery use—that is, for coal used at the mines. In fact, out of one hundred million tons, you will find there will be only available for domestic consumption about sixty-six million tons. Sometimes it runs higher than that, according to the way the steam sizes are mixed in with the domestic sizes. The price of the coal at the mines is predicated entirely upon the ability of the miners to get rid of these steam sizes. If they cannot get rid of these steam sizes, the price will have to go on the domestic, in order to keep the mines going. We have an instance of that here where one mine, in consequence of being loaded up with a large surplus of steam sizes positively refused to fall in line with other mines, and reduce its price, consequently we have a price running from \$7.45 for stove coal—that is one of the important domestic sizes, up to \$8.10 for line company coal.

By Mr. Ross:

Q. At the mine?—A. Yes.

By the Chairman:

Q. What do you mean by "line company"?—A. The old-time owners who at one time operated the mines in conjunction with the railroads, but who are now disassociated by a Supreme Court decision.

Q. How much do they control?—A. About eighty per cent.

Q. Have you any more about this?—A. I am giving you a general outline of the situation that is liable to arise at any moment here. Of course coal is lying along the tracks—there is a surplus of that—and the real reason for that is that the railway companies have not placed their contracts with the companies. They generally do that about the end of March or the 1st of April, but they have made no move in that direc-

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tion as yet, and just as soon as they are placing these contracts, they will be placed simultaneously, and the railways will gobble up all there is and put it away and you will have then a big demand and you will find that soft coal which is selling generally at from \$3.25 to \$3.50 at the mine, will go up to \$3.75 or even \$4.

By Mr. Cowan:

Q. Are you referring to the American railways which make their contract in April?—A. Yes.

Q. The Canadian railways do not make them quite so early?—A. The Canadian railways do not seem to make many contracts anyhow, because they are simply waiting to see what is the best price they can get. They take coal now and they take coal then. Of course, the Grand Trunk, as you know, owns its own mines.

By the Chairman:

Q. Is the production of anthracite coal this year about normal, as compared with other years?—A. Oh no; subnormal.

Q. How is that?—A. You take your production of eighty-eight million tons, and put that against one hundred million tons three years ago—

Q. I mean this year, as compared, say, with last year?—A. No, it has been decreasing each year.

Q. It is still less this year than last year?—A. Yes.

By Mr. Cowan:

Q. Take the Ontario importer of anthracite: is he laying in his usual supply now?—A. No.

Q. Do they not usually store it?—A. As a rule.

Q. Is it because they have not sufficient storage accommodation?—A. I am speaking generally for Ontario, and the reason for that is that the people are not buying.

Q. You would think it would be a profitable thing for the dealers to put in their supply now?—A. No.

Q. You do not think so?—A. Not from an economic standpoint. From a business standpoint, I would say no. I think they are doing perfectly right. It requires a great deal of money to stock coal.

Q. Are not the banks willing to finance the stocking of coal?—A. No.

By Mr. Ross:

Q. Mr. Harrington, did I understand you correctly when I heard you say they were selling coal at the mines at \$7.45?—A. Yes, but none of that is available. It is all taken up. It is going east to the Eastern States.

Q. It would not be available for Ontario?—A. At the other mines.

Q. What is it worth there?—A. About \$7.60 or \$7.70.

Q. What is the retail price of anthracite in Ontario to-day?—A. It differs in every city. It is predicated entirely on the freight rates from the border.

Q. Take the city of London for instance: What is the price in London?—A. I think it is selling in London at around \$16.

Q. I think that is about right. You say the men in London under your jurisdiction were allowed only 50 cents a ton?—A. Yes.

Q. You collected fees amounting to twenty-six thousand dollars when you were Fuel Controller?—A. Yes.

Q. What were the expenses of your office?—A. They would run about \$25,000 a year.

Q. Then you had a little surplus?—A. For instance, a year like this, if we had the license fees in force there would be a surplus in our fees of between seven and eight thousand dollars.

[Mr. Henry A. Harrington.]

Q. I think they should keep you on. I do not see any reason why they should not. Now, take the price of coal in London, \$16.—A. Yes.

Q. It costs \$7.70 at the mines?—A. Yes.

Q. What is the freight rate on anthracite from the mines to the border?—A. \$3.64.

Q. What is the ferrying charge across the lake?—A. That coal for London would come all rail.

Q. It would come by rail?—A. Yes.

Q. The rate of \$3.64 would be to London?—A. No, only to the border.

Q. Then what would it be to London?—A. It would be \$1.65.

Q. What would be a fair allowance for distribution?—A. Just a minute, before you get that far. You add fourteen per cent to the sum of \$7.70 plus \$3.64?

Q. Yes, I understand. That is \$1.50 or \$1.65, I have got that. Well, what would be a proper and fair amount for distribution?—A. For the city of London?

Q. Yes.—A. I should judge about \$2.75.

Q. Then they are losing money, according to your idea?—A. Precisely. They are all losing money. The coal dealers in London, and in the city of Toronto, and I think even in the city of Ottawa to-day are selling coal lower than they should, and for this reason: They have no demand from the public; they are in the same position as Eatons and Simpsons; they want to get rid of the stock in order to get money for more stock, and they lower the price. Why, here is coal in the city of Toronto at \$15.50, and there is not a coal dealer in the city of Toronto that is making a postage stamp—in fact he is losing money, because the most of the coal is a high priced coal which was brought in to meet an expected hard winter which did not occur.

Q. What did he pay for that?—A. \$8.10.

By Mr. Cowan:

Q. At the mines?—A. At the mines.

By Mr. Ross:

Q. I understand they are selling coal up there as high as \$23, and \$24 a ton?—A. I am speaking of the coal which has the benefit of the lowest price. When you come to \$23 and \$24-coal you are going into coal that costs \$11, \$12 and \$13 per ton at the mines from the independent operators.

Q. What is the difference?—A. The difference is this; the line company have a certain trade. They make up their trade every spring; they know just exactly where their coal is going to go; they know what their anticipated output is, and if it does not come up to that they go to the independent mines, leasing from them and get sufficient coal to make up the deficit. Now, no matter who comes in in a time of emergency, they cannot get a pound of that coal, because it is pre-empted; they are forced to go out to the independents who are not under any price restriction—it is simply a case of buying at any price you can get it for.

A notable case of this came out the year before last when the price went off. There was a dealer from a certain town in Ontario who went down to the mines to a broker. He wanted four cars of coal. He did not come to me, but he went direct to the mines. The broker said "I will go out and do what I can. How much can I pay?" The man said "I have got to have that coal, pay anything you have to". In the meantime, the man went himself to the mines, and the broker got two men and they all went down to Carbondale, which is just out of Scranton, and when the coal was secured the man found that he had paid \$13.50 a ton for coal at the mines which, if he had stayed in Scranton and allowed his broker to negotiate for him, he would have got it at around \$12 a ton, but he went to the mine himself, and the three men were bidding against each other.

[Mr. Henry A. Harrington.]

By the Chairman:

Q. Mr. Harrington, I have been told frequently by retail dealers that during the past winter they were unable to buy from the independent coal companies at anything less than \$5 over the price charged by the line companies?—A. That is correct.

Q. And a great deal of the coal coming into rural Ontario was bought from these independent companies?—A. Precisely.

By Mr. Cowan:

Q. And they would not have got it at all if they had not had these independent companies?—A. Precisely. As I have already explained, the line companies have not the coal; it is all contracted for.

By Mr. Ross:

Q. Did you not say the retailer could not buy from the line companies?—A. No, because it was all contracted for.

By Mr. Cowan:

Q. It is all contracted for?—A. Yes.

By Mr. Ross:

Q. It is all ordered?—A. Yes. They work so as to get their cars back quickly, they will send in to Toronto 250,000 or 275,000 tons of coal to one dealer, and 100,000 tons to another dealer—it is a continuous flow.

Q. Could that not all be prevented by some co-operative buying through a Fuel Controller in Ontario, for distribution? You say you have to get three million tons of anthracite for Ontario?—A. Yes.

Q. Could not the Fuel Controller make an immense contract with the line companies to obtain that coal?—A. No.

Q. Why?—A. Because he is a newcomer in the field, and they have their trade.

Q. Could they not develop more trade?—A. Yes, I suppose they could. I know for a positive fact that they are not amenable to price. That has been tried.

Q. And they produce eighty per cent of the output?—A. Yes. You must remember one thing, gentlemen, and do not get away from the fact that we only get four per cent of the production in Ontario. Their great market is in the east and the Central States. These men have an enormous market there. Just allow me to show you something which will bring out two points. At the time that the Fuel Administrator was appointed for the United States, Dr. Garfield, the anthracite situation became so acute that it was absolutely necessary for him to allot coal so as to take care of the emergency points. There is where the value of Mr. Magrath came in; he was on the ground. Here is what the United States Administrator did; for Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, and Connecticut, called the New England States, he allotted 10,331,000 tons of coal; for New York, New Jersey, Pennsylvania, Delaware, Maryland, the District of Columbia, and Virginia, called the Atlantic States, 31,417,000 tons; for the Central States, Ohio, Indiana, Illinois and Michigan, 3,481,000 tons; for the North-west States, Minnesota, Wisconsin, North Dakota and South Dakota, 2,380,000 tons; for the Trans-Mississippi—their original requirements—Missouri, Kansas, Nebraska, and Iowa was 627,965 tons. They were absolutely cut off from coal.

By Mr. Ross:

Q. What States were those?—A. Missouri, Nebraska, Kansas and Iowa. In Canada, the normal requirements were 3,856,021 tons, and we were allowed 3,602,000 tons.

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By Mr. Cowan:

Q. They could have cut us off if they wanted to?—A. Sure.

Q. All of which goes to show that if we could, by any manner of means, educate the people to use our own coal, we would be infinitely better off.—A. Oh, absolutely.

By the Chairman:

Q. Are there any special reasons why they treated Canada in that way?—A. In the first place, the United States had established a trade basis in Canada, and it would not have been to the advantage of either country to have that trade basis disturbed. Another reason was that Canada, being adversely situated on account of our frigid zone requirements, as they call it, needed more coal than did the States contiguous to a tropical climate.

Q. Was there anything said about the price?—A. It was fixed by the Fuel Administration.

By Mr. Cowan:

Q. Was any of this generous treatment due to the fact that we were Allies in the war?—A. Yes.

Q. Then now, we would not obtain that same generous treatment on that account?—A. I think we would. I do not think the United States would arbitrarily cut us off unless it was a case of absolute necessity where their own people would have to be provided for.

Q. In other words, if they had a big strike—A. That would certainly cut us off.

Q. We would not then get this same generous treatment?—A. We could not expect it.

By the Chairman:

Q. About these independent and line coal companies, Mr. Harrington—to me that is a very important matter, the price paid to the two kinds of companies, and we do not want any misunderstanding—it was quite customary, as I understand you, for the interior coal dealers to buy their coal from independent coal companies at a rate of about \$5 per ton in excess of what the line companies were charging?—A. That was during the period of emergency.

Q. But last winter?—A. Last winter, to some extent.

Q. Have you any idea of what percentage of the coal that comes into Ontario would be bought under those conditions?—A. It would amount in bulk to about thirty per cent, I should judge.

Q. I presume the retailers were able to get some from the line companies?—A.

Q. I have been told by some of the dealers that they were able to get a car occasionally at a lower price and in that way they were able to reduce the price by an average.—A. Yes, that is what they did. In fact, they were given to understand at the beginning that in order to supply their local requirements, or if they confined themselves to line coal, the people ran a chance of freezing, and we were urged to go out into the markets and buy coal; in fact, I succeeded in bringing in thousands of tons of coal in that way, and distributing it to the various dealers, and where he had a ton of line coal it was logical for him to mix it up and average his price. Even coal dealers are not expected to lose money, or we would not have them very long.

Q. Do the independent coal companies adopt this method only in the fall or throughout the year?—A. It all depends. When we speak of the independent companies doing these things, we have to get away from that idea—the independent companies are not tied down by any contracts, in fact they will not allow themselves to be, except in very rare instances. A broker will come along and purchase 35 or 40 cars of coal from the independent man, pay his price, and the broker will sell this just the same as you sell stocks in the market. We are the lambs, of course.

[Mr. Henry A. Harrington.]

Q. Will you trace that a little more?—A. Well, Smith would buy his coal from an independent, and sell it to Jones; Jones would want that amount for a dealer in Rochester, before he had time to ship that coal, it would be bought away from him at a price, say, 50 cents a ton higher, by a wholesaler in Buffalo. The wholesaler in Buffalo would get the coal to Buffalo. Now, there is the independent's price, then Smith's 75 cents a ton, then Jones has 50 cents, there is \$1.25, and his second 50 cents makes it \$1.75 which we have already. He sends that to Buffalo and that dealer in Buffalo will want to send that coal to Tonawanda, and he sells it to the wholesaler for 75 cents a ton higher; Tonawanda sells it to the Ontario wholesaler at an advance of 75 cents, and the Ontario wholesaler gets 30 cents which is all that is allowed him, so from that you can draw that coal from the independent man to the Ontario wholesaler. During the regime of Dr. Garfield as Fuel Administrator of the United States, the period between the first 75 cents and the Buffalo dealer was cut out.

By Mr. Cowan:

Q. All of which goes to show that the independent has his price.—A. That is it.

By the Chairman:

Q. Do these commission agents or brokers, as you call them, act independently, or are they sometimes salaried agents of the independent coal companies?—A. I would not think they were. In fact, I am very well acquainted with a large majority of the independents, and I do not think they are men who would stoop to that.

Q. The reason for their doing it is the demand?—A. Precisely. These men take advantage of the situation to buy the coal, but you must remember that outside of the independent miners there are a large number of miners which are thrown into the business, and which are known as "snowbirds" or "wagon miners". Their mines may be located five or six miles from the railway, and in some instances, they use motor trucks to haul the coal and it is amazing to see the climbing these trucks will do.

By Mr. Cowan:

Q. May I have those recommendations of yours, as I would like to look over them and ask you a few questions in regard to your suggestion—

By the Chairman:

Q. We have been led to believe that another cause of the conditions in Ontario was the shortage of cars for shipments from the mines?—A. That is correct. You will realize that, during the war, the situation was rendered more acute by the necessities of the munition work and by the cars required for shipments from the munition works to the borders or ports.

Q. What about last winter?—A. Last winter it was occasioned more or less by crippled cars.

Q. What is the outlook for the coming winter?—A. Precisely the same condition as I have stated to you. Now, in the last report there were 175,000 open top cars on sidings. Most of them, forty per cent of them at least, are crippled, and are in very bad condition, and repair gangs have been laid off to a considerable extent, yet with 175,000 cars, we are short forty per cent of the requirements for normal conditions. In other words, to supply a normal demand for open tops, 215,000 cars are necessary.

Q. The transportation companies are responsible for that, and not the coal operators?—A. Absolutely,

Q. Are there not also difficulties experienced at the boundary points, such as the Niagara frontier?—A. These difficulties arise out of a congestion of freight. It would not necessarily be a congestion of coal. You take the Niagara frontier: We have two gateways, one at Suspension Bridge and the other at Black Rock. The suspension Bridge will handle all the freight of the Wabash and the Lehigh Valley, and Black

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Rock will handle all the New York Central, the Michigal Central, the Grand Trunk and the Canadian Pacific. Of course, the Michigan Central is the first division of the Canadian Pacific on Canadian soil. Those cars all get bunched in the east Buffalo yards, and the Black Rock yards. We may have a condition, as has happened before where the cars come from Chicago, destined for Boston and New York, and they would be shoved on a siding right in front of cars going west. The night freight from the west would come in, destined east, and the cars would all be bunched in and would be held up, particularly in one way, and we have had to go out and by various processes dig them out, shovel out snow one way and do something else the other way to get them out, but the final result was that we got our coal, but it was pretty hard work. Now, in the Erie yards we have the same condition, and at times in the yards at Suspension Bridge and Niagara Falls, and in order to relieve the situation, conditions have arisen similar to that which I spoke when Mr. James Clarke worked with me, and we have had Delaware, Lackawanna and Western engines bringing coal cars even into the city of Toronto over the C.P.R. and Grand Trunk tracks. We have had T. H. & B. engines, and D. & H. & Lehigh Valley engines helping us. The United States helped us out wonderfully; the railways allowed their locomotives to go over our lines—with a pilot, of course.

Q. Last fall, as you know, Mr. Harrington, the price of coal—I am speaking now of Western Ontario, although the same situation probably prevailed all over Ontario—constantly arose from \$16 and \$17 in the middle of summer up to from \$21 to \$24 in December and January?—A. You can trace that back to this very thing I have given you.

Q. To the buying through the brokers?—A. To the buying through the brokers and the raise in exchange.

Q. And the great demand?—A. To the raise in exchange.

Q. There was not much increase in exchange?—A. You can trace it back to that policy.

By Mr. Douglas (Cape Breton):

Q. The rate of exchange would have nothing to do with the high cost in the United States?—A. No, the Chairman had reference to coal sold here.

By the Chairman:

Q. The retail prices?—A. The retail prices. It had no effect on the price at the mines.

By a Member:

Q. Is there any increase in the freight rate?—A. Oh, yes.

By Mr. Cowan:

Q. According to your statement here to-day, you have evidently taken the ground that it is practically impossible to bring any coal into Ontario from Nova Scotia?—A. I am speaking from an economic standpoint entirely.

Q. Is it not true that heretofore it has been simply an occasional shipment into Ontario, and consequently the cost would be much higher than if there was a regular trade established as between Ontario and Nova Scotia? For instance, if you are talking on a regular line of boats, supplying Quebec, that is, Montreal and the Quebec district, and that line of boats should continue into Ontario, would it not be possible, in your opinion, to deliver that coal much cheaper in Ontario than has heretofore been done?—A. That is a reason I made the recommendation for the committee to go into these tariffs, but of course, education must precede that; you

[Mr. Henry A. Harrington.]

must develop a demand. I understand there is an extraordinary amount of coal in Nova Scotia which is undeveloped. The reason for that is that there is no market for it.

Q. Quebec is the natural market for Nova Scotia coal, but if there were a regular line of boats plying there, making it their one business to continue on into Ontario, it would certainly reduce the cost of coal in Ontario, would it not?—A. I really could not answer that question, doctor, because it is something that would require, to my mind, an investigation by those directly concerned in the production. They are the ones who sell the coal.

Q. I think it is reasonable to conclude that if a limited quantity is handled, it would cost more to do it?—A. Unquestionably; there is no doubt about that.

Q. That is the only way to get into the Ontario market—to go at it in a wholesale manner?—A. Precisely. You take the thirteen counties that are located between Belleville—take Belleville as the central point, from the inland distributing point of the Dominion Coal Company—take Belleville as the central point, and going east you have thirteen counties up to the border-line, and the requirement would aggregate approximately 535,000 tons—speaking of bituminous, because there is no anthracite, as I understand it, in Nova Scotia. There is a 535,000-ton market within a reasonable radius of Montreal.

Q. And that is worth getting for Canadian miners?—A. It is worth going after, but everything is against it; your freight rates are against it.

By Mr. Douglas (Cape Breton):

Q. What is against it?—A. The freight rates, undoubtedly.

Q. From where?—A. The local freight rates from Montreal down. You see there is no tariff; it is local. Take for instance, the coal coming into Ottawa: It comes into, I think, it is Cecil Junction, is it not, Mr. Heney?

Mr. HENEY: Yes, Cecil Junction, and Massena Springs, and Ogdensburg; several points.

WITNESS: Now, take the eastern gateway from the Westmoreland region: the American rate is \$3.60.

By Mr. Ross:

Q. From where to where?—A. From the mines to the border. We will say to Cecil Junction, \$4.02, and to Montreal \$5.07.

By Mr. Cowan:

Q. That is the American rate?—A. Yes.

By Mr. McKenzie:

Q. Are you talking of bituminous coal?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. We had a rate the other day of \$4.53.

By a Member:

Q. The clear field rate is \$4.40.—A. This is by way of Cecil Junction, not to Montreal.

The CHAIRMAN: Might it not be well for us to take the freight rates from the transportation men when they appear before us?

Mr. ROSS: If this witness knows the rates, why can he not give them?

The CHAIRMAN: There seems to be considerable difference of opinion.

[Mr. Henry A. Harrington.]

WITNESS: The difference is that they were taking two rates from the mines to Ottawa, which is established, but what I am particularly referring to is coal coming from our own mines. I will admit I am not very conversant with that.

By Mr. Douglas (Cape Breton):

Q. To which mines are you referring?—A. Nova Scotia.

Q. To Montreal?—A. Yes. They bring the bulk of it to Montreal, and it is loaded on to cars and shipped into these thirteen counties, and a local rate prevails, which is always higher than a through rate.

Q. How much?—A. I do not know. Probably a cent or a cent and a quarter, or a cent and a half a mile.

By Mr. Cowan:

Q. Can you not take it by barge up the St. Lawrence?—A. I do not know.

By Mr. Douglas (Cape Breton):

Q. You said it was not economically sound to bring Nova Scotia coal into Ontario?—A. Economically impossible at the present time.

Q. Does that not presuppose some things about which you know nothing? Does not that presuppose the cost of coal in Nova Scotia?—A. Precisely.

Q. And also the transportation charges from Nova Scotia to Montreal?—A. Yes.

Q. As well as the local freight rates to the points to be served in Ontario?—A. Precisely.

Q. When you say it is economically unsound at the present time, we have to presuppose that you know these conditions?—A. In a general way.

Q. You know the general costs?—A. In a general way. I know you cannot lay coal down, for instance, in the city of Tweed or at Perth, from Nova Scotia to-day as cheaply as you can from the American mine?

Q. Why?—A. On account of the freight rates.

Q. What freight rates?—A. The freight rates from the mines to the destination, as compared with the rates from Nova Scotia.

Q. What rates do you refer to? You are not referring to all rail freight?—A. No.

Q. Water freight to Montreal?—A. Yes.

Q. Do you know what that is?—A. My information is that it will cost for a ton of coal from the mines in Nova Scotia to Tweed—

Q. Take Montreal?—A. Well, take Montreal. My information is that it can be laid down in Montreal at approximately \$8.25 a ton.

Q. We are speaking about the freight rates, not the cost of the coal at the mines?—A. Probably \$1.25 to \$1.50 a ton.

Q. Then what are the local freight rates?—A. As I said, I do not know. I am speaking only from information.

Q. You do not know the local freight rate?—A. I am speaking from information, and I am giving you the information I have received, and that is this: that it runs from 1½ cents to 2 cents a mile from Montreal going east down to the eastern ports.

Q. You have information in regard to the cost of production in Nova Scotia?—A. No, only what they tell me, that coal is \$7 at the mines.

Q. Then it would not be correct to make that statement that it is economically unsound to take Nova Scotia coal into Ontario?—A. Until it is refuted, I think my statement stands.

Q. You are taking the responsibility of making the statement that it is not economically sound to take Nova Scotia coal into Ontario?—A. Precisely.

The CHAIRMAN: His statement is only his personal opinion.

WITNESS: Made from the statement that coal cost \$7 at the mines.

[Mr. Henry A. Harrington.]

By Mr. Douglas (Cape Breton):

Q. There is no testimony here to that effect?—A. I do not know; I think there has been.

Q. No. There is testimony that they have offered to sell it at \$7. on board ship on the Atlantic sea-board.—A. Yes, \$7. shipping point.

Q. That is an offer to sell?—A. I see.

Q. But that is not the cost of production?—A. I do not know anything about the cost of production.

Q. If you do not know anything about the cost of production, then it is not safe to make the statement that it is not economically sound to send coal into Ontario.—A. Well, I do not know. I made that statement from a statement that was made, but you say that an offer was made to sell coal at \$7 at originating points. Now, can you get it any cheaper?

Q. I have no doubt, it can be obtained cheaper.—A. Can you do it?

Q. I am not the witness—A. There you go; you want to pin me down, but at the same time when I am holding my ground, you will not say that you can get coal at \$7. a ton.

Q. Coal has been offered at \$7—A. Can you get it? That is my point. Can you bring coal at \$7 a ton delivered in Montreal?

Q. An offer has been made at \$7 and it has been said that \$7 is too high, and also that the cost of production—you apparently have not been reading all the evidence—that the cost of production was given by the President of The Dominion Steel Co., the largest steel company down there, at \$3.40. Now, assuming that it is \$3.40, or even \$4., or go as high as \$4.25 your statement would not hold.—A. It will hold until you can get it at less than \$7 at its originating point.

The CHAIRMAN: Would it not be well to leave this matter with the committee. The witness has expressed his opinion. I think the best way would be to leave this with the committee to decide.

Mr. McKENZIE: I think that is what Mr. Dick said, that it was \$8 and something at Montreal.

Mr. DOUGLAS: No, Mr. Dick, for example, made this statement that the total cost for delivery of coal in Toronto would slightly exceed \$6—his evidence says \$6.04, assuming that the freight rate from Montreal to Toronto is at the rate of one half cent per ton, which is the same freight rate that the Grand Trunk Railway charges for carrying American coal in Canada—then we could deliver Nova Scotia coal at \$6.04 a ton, as against the rate that is now charged in Toronto, of about \$7.50—he said \$7.50 although he was not clear as to what the price was there for American coal, so that Mr. Dick's evidence is that it is economically sound.

The CHAIRMAN: The committee will take those statements into account, when we come to consider the matter. I believe I interrupted Mr. Ross some time ago, and I think he should now have this opportunity to consider.

Mr. ROSS: I was going on with the point of the possible substitution of bituminous coal for anthracite and its practicability. That was what I was going to take up.

By Mr. Ross:

Q. Could our domestic users, Mr. Harrington, taking the ordinary Ontario furnaces which they have—why could they not use bituminous coal instead of anthracite, except for this lack of education of which you spoke? They are using bituminous coal from the Galt mines in the West for heating their homes. It is impossible for us to do the same thing?—A. No, it is not impossible; it is a matter of education.

Q. Is that the only thing that is lacking?—A. Yes.

Q. You say it is dirtier?—A. Undoubtedly.

[Mr. Henry A. Harrington]

Q. Is there any device known for doing away with that?—A. Not at the present time.

Q. Would it heat your houses with the same comfort?—A. No, it is not as regular in its heat-diffusing properties as anthracite. The reason for that is that soft coal, just as quickly as the cold air strikes it when you check it—as soon as the cold air strikes it chokes on the surface, that keeps the heat in, instead of sending it out.

Q. As a practical man, what is your suggestion of what the householders should do in order to use bituminous coal to the best advantage?—A. Mix it with anthracite.

Supposing he cannot get anthracite?—A. Then the only thing he can do is to have his grates adjusted.

Q. How?—A. At the present time, the grates for anthracite coal are fairly wide to permit of the passage of cinders or clinkers. This would have to be adjusted to allow a green coal core to be in the centre. That would absorb the gases, and allow a ring of fire to be up around the coal, which is not the case with the ordinary grate.

Q. What do you mean by a "core," an aperture?—A. No, the filling in of raw coal, unburned coal with very little draught. That remains in the sides, and is gradually impregnated by the heat from the sides, and it takes the coal and absorbs the gases and that burns the coal on top of the pile.

Q. You mean, when you have to use bituminous coal for heating, you should take out the centre of the fire?—A. No, because that green core will very well preserve it until the fire burns down. It will find its way down through the aperture, because the other has cased around it. It has been used in Toronto homes with fairly good effect, but at the same time the housewives do not like it because it smokes up the house.

By Mr. Cowan:

Q. What do you mean by "smokes up the house"?—A. There is always more smoke from soft coal, and the chimneys are constructed for carrying off gas from hard coal, and they are naturally smaller. The soft coal chimneys require a large opening to carry it away efficiently and if it has not a large opening with the slightest back draft, you will fill the whole house with soot.

Q. That may be in the construction of the houses, but we use soft coal, almost entirely, in our city, and I have never heard any complaints.—A. Have you measured the apertures in the chimneys, with the apertures of the chimneys in the cities?

By Mr. Douglas (Cape Breton):

Q. When you get down to the size of the stove-pipe it would be pretty objectionable?—A. Oh, unquestionably.

By Mr. Cowan:

Q. The Alberta coal and the Nova Scotia coal coke very well. Now, Prof. Pitcher, when he was here the other day giving his evidence, said that wherever they had been able to get the people to start the use of coke, they would not go back to the use of anthracite. If that is the condition, with very little education would that not meet the situation in Ontario?—A. Yes, it would, but with all due respect to Mr. Pitcher, from my experience in Toronto I do not agree with him. We have a case right in Toronto to-day. Prior to the war the Chinese laundries in Toronto were using coke. You would not find two per cent of them using coal. They could not get coke in Toronto on account of the quantity of soft coal required by the gas manufacturing companies for the making of their gas, and the Chinese laundries resorted to anthracite and they have been at it ever since, and it is a hard thing to get them back to coke. They prefer anthracite now. You take in the homes where they used coke through that period, they are using anthracite to-day. They may go back to coke, but, as you say,

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it is a matter of education; they must be impressed with the scarcity, and with the knowledge that the anthracite supply is diminishing, and will not again increase or become normal.

By Mr. Cowan:

Q. In other words, necessity is the only thing that will educate the Ontario people?—A. Absolutely; nothing else.

Q. Mr. Harrington, just recently the Government of Manitoba, the Government of Saskatchewan, and the Federal Government—the three of them—have demonstrated a briquetting plant. They are now manufacturing carbonized briquettes which according to the report of our own research bureau, and from our actual experience, are equal in heat value to American anthracite. There are no cinders, clinkers nor dust. Those will be laid down at Fort William at \$14 a ton. Would that meet the anthracite competition in the province of Ontario, \$14 at Fort William? The price across will be what?—A. Well, the price across will be problematical. If you undertake to come into the large consuming centres of Ontario you have got to figure that your lake rates will be higher, because the boats would go from Belleville or Kingston, or Ogdensburg, or Hamilton, back to Oswego or Charlotte empty—they would go over light, and of course your rate would be higher. That is not the chief objection, however.

Q. What is the chief objection?—A. Degradation.

Q. There is no degradation?—A. Pardon me, there is.

Q. I have used them for years.—A. You take the briquettes and bring them by the carload, and you dump them into the elevators, and piles, and then re-handle them and dump them into the hold of a boat, and bring the boat up to the wharf, and you shove in your clams into the hatchway, and pick up a clam-load of them, and reload them into cars, and then when they reach their destination, you have to unload them from the cars and haul them up to your house and unload them there and dump them into the cellar—certainly there is a great deal of degradation.

Q. I have never seen any of that at all.

By the Chairman:

Q. Are there any surplus of briquettes which are available for Ontario's use?

MR. COWAN: The quantity now is limited, the one unit that is now manufacturing them is limited, that is true, but there are fifty-nine billion tons of coal there from which these briquettes can be manufactured. It is scattered all over Manitoba and Saskatchewan.

THE CHAIRMAN: How long before there will be any surplus?

MR. COWAN: They can start to build them up at any time. You would have to use another unit, and it has been expected that private enterprise would take that up, because these can be manufactured and laid down in Regina at less than one-quarter. I have paid from twenty-five to thirty dollars a ton for coal in the city of Ottawa, since I have been here, and it is the dirtiest darned stuff, it is absolutely a crime to allow that stuff to come in here. That is what we have to compete with.

WITNESS: I do not blame you one bit for your expressions. I do not think they are half strong enough. I heard some yesterday that would put your expressions into the Bible and make them fit there very nicely.

MR. COWAN: It is a crime to permit them to come in here.

WITNESS: That is one of the difficulties we have encountered. We have dealers in Ottawa getting coal during normal times, and even at a time of emergency, from the line companies. Those line companies have, in so far as it was possible, gone over their coal thoroughly. Of course, under the laws of Pennsylvania they are allowed a certain amount of impurities and a certain amount of mixture of sizes, but they do

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not always confine themselves to that, as they will not allow any but good coal, with very little exception, to be taken out, but when you have this amount going out in times of emergency, where you have to have coal, the dealers will go into the coal fields themselves, and they will buy so much coal and they do not see the coal until after the freight is paid—that is one of the demands, you have to pay your freight in advance in American funds—and they have the commodity on their hands before they see it. It is not their fault. They do not see the coal. They have done their best to oblige the customers, and the customers must take their chance. All that is brought about by abnormal conditions and due to the absence of inspection or an inspector at the mines, or any inspectors being employed by the Dominion Government to supervise the coal when it comes in. If that were done, the moral effect alone would be sufficient to drive out the snowbirds very soon.

By the Chairman:

Q. What do you think of a system of inspection?—A. Absolutely essential.

Q. Practicable?—A. Absolutely so.

Q. In what way could it be carried out?

Mr. DOUGLAS (Cape Breton): Is that for anthracite, or any coal?

WITNESS: For any coal. It is easy. For instance, you take here we have our principal gateways—we have only four—which require attention. There is no use to object to our coal, because the minute you do, you do not get it. Our coal is only dirty in consequence of its being dumped into the boats and hauled out again. The dirt is composed of degradation, dirt, and erosions. There was a time when it was worse than it is to-day, but now when they have a complete loader—that is where a car is taken up on a trestle and taken hold off by a clam and turned completely over, the coal goes down into the hold of the vessel in bulk and the erosion is less than if it were poured into a chute and goes into the vessel in streams.

By Mr. McKenzie:

Q. What is the purpose of that inspection, to serve our people the best of coal?—A. Precisely.

Q. And the mine seller puts it in the car and sends it off?—A. Yes.

Q. That inspection would be against our own people. You cannot revert back to the miners?—A. No, I would not say that, and for this reason: that it is not the miners who are selling the coal.

Q. The mine owners?—A. Nor the mine owners. It is the brokers. If that inspection were held, the brokers would know there was no use in getting that dirty coal, as it would be turned back on them. The moral effect alone would be of great help.

Q. And it would help all along the line?—A. Yes.

By Mr. Ross:

Q. Then the broker would go to the mine owner, and say, "Boss, you will have to sell me clean coal"?—A. Yes.

Q. Because he could not dispose of his dirty coal?—A. No.

Q. And so he would not buy it?—A: That is it.

Q. Did I understand correctly, Mr. Harrington, when I understood you to say a little while ago, in regard to anthracite coal that the retail dealers in Toronto cannot buy anthracite coal from the line companies?—A. No; you had better qualify that question, Mr. Ross. When I said the "retail dealers," I did not speak of all the retail dealers. I said that the line companies have a regular trade established, for the past thirty years in Ontario.

Q. That would include the retail dealers?—A. Yes.

[Mr. Henry A. Harrington.]

By the Chairman:

Q. Some of them?—A. Yes, some of them. Of course, they include the wholesalers as well, but the line companies have no wholesalers in the province of Ontario; they are all retailers.

By Mr. Ross:

Q. Just wait a minute. Then the retailer who is in a particularly advantageous position by reason of being able to buy from the line companies will get his coal a great deal cheaper than the retailer who has to buy from the retail companies?—A. Precisely.

Q. Does that depend upon the amount a man can buy from the retail companies?—A. No, not to-day. It formerly did. In fact, the line miner has had an increasing demand, and is satisfied, to send as small a quantity as possible over the border.

Q. Then it is all a question of business, because the line companies will sell to their own customers first?—A. That is it.

Q. What can you say, as fuel controller,—if you had charge of the whole supply for the province of Ontario, what makes you say that you could not go to a line company and say: "Here I will order three million tons," and be enabled to get that coal at a lower price, at a saving of from four to five dollars on a ton? You say you cannot do that?—A. No, sir.

Q. That is incomprehensible to me?—A. I think I can clear that point up in a minute. If I were to do a thing like that—we will say there are four line companies supplying Ontario, that would mean 750,000 tons from each company. They would have to supply me with that quantity of coal, and in order to do that, they would have to cut off 20 or 30 of their United States connections.

Q. You are assuming there is no possibility of further development in their mines?—A. I have already told you, Mr. Ross, that the production is limited at the mines of which we are speaking—the anthracite mines. We have only 432 square miles, absolutely all of it developed.

Q. You said you had a supply there for fifty years?—A. Yes, but not for Canada. I will tell you that I honestly figure that if in ten years from now you are getting 100,000 tons of anthracite coal into Ontario, you are lucky.

Q. I appreciate that, but that does not militate against the point I am trying to make, that they would appreciate an offer of that kind.—A. They are restricted.

Q. How?—A. They are restricted in their operation.

Q. The coal is there?—A. Yes. But take some of our largest mines—

Q. It is only a question of getting miners and capital.—A. Do.

Q. Well, let us have it.—A. Just a minute now. The anthracite mining operations may be likened to this room. You are restricted to this space. If you go to that window, you will fall out; if you go outside the side of these mines, you are into clay; you have no coal there. It runs in seams. That seam may be five or six or seven hundred feet underground. It is limited as to height too. It may be only eight feet or perhaps ten feet—very seldom above that, although sometimes they are 16 feet high. That is as high as they can go, and they can only put a certain number of miners in there, and they can only get out a certain tonnage each day. Now another factor is, as has already happened in one of the mines when they advanced upon eleven hundred yards—

Q. Cannot they open other seams?—A. They have not got them. The other companies are taking care of the other seams on their property. You must remember that they have the most expert geologists to-day working constantly looking for new seams. To come to a seam from the other end—you cannot compute the cost because

[Mr. Henry A. Harrington.]

they would have to go down from the other end, and in many cases they are under a river.

Q. Let us get at that in another way. They are supplying three million tons of coal to Ontario. Would it not be possible for the Fuel Controller to go to a number of independent coal companies, if he cannot go to the line companies, and make contracts with them. Could you not make it attractive enough so you could get the coal at a reduced price?—A. No.

Q. Why?—A. The independent companies are outside—

By Mr. Cowan:

Q. As soon as you contract with them they become line companies?—A. No, not necessarily. The reason for that is that the larger independent companies have their contracts in the United States.

By Mr. Ross:

Q. But they supply us with the coal?—A. What is left of it. Supposing, as a Fuel Controller, I was to go over to the mines—I could not contract for any three million tons, because I think about sixty per cent of the coal that comes into Ontario is brought in by line companies, and that would only leave about forty per cent to contract for, 1,200,000 tons.

By the Chairman:

Q. You would have to have an order for that?—A. I would have to have an order for that. In the first place I am up against that proposition, who will get the order for me?

By Mr. Ross:

Q. As a matter of fact, you know where the order would come from?—A. I do not know. We will assume for the sake of argument that I got that order for 1,200,000 tons. Now then, I do not suppose in the entire independent field there are over 40 companies whose output for the year would equal that amount of coal, and it is pretty well pre-empted—taken away, either by the line companies, or the large companies outside. I would have to split up all these contracts among a certain number, and immediately I did that I am creating a competitive market, and they will not close with me. Supposing I went to work and said: "Here is a price, 75 cents higher—75 cents over what you are charging these other people", even then I doubt whether they would do it.

Q. Did you ever try it?—A. No, and I never will because I know what will happen, and because there were others who tried it, and the first thing they knew they were running the price up four or five dollars above the others.

Q. I understand these men who have large contracts for anthracite coal—say they will have an order on the line company for 300,000 tons—they have to take it by the month?—A. As a rule.

Q. So much per month?—A. So much per month.

Q. And the trouble is that they have limited storage facilities?—A. Yes.

Q. The people would not buy in April, May and June and so on, consequently they have to stop their order?—A. Yes.

Q. And that means stopping work?—A. Yes.

Q. If you could persuade the people of Ontario to buy their coal in March and April and in May, would you get a reduced price for your anthracite coal?—A. Undoubtedly, that is what I have been trying to do, to have them get their coal in. That has been my one and only pride for the last ten years.

Q. Would you get a reduced price?—A. Absolutely, particularly at these times I want to cite a case—

[Mr. Henry A. Harrington.]

Q. Let me ask you one further question. When you were the Fuel Controller, you knew what retail men got their coal from line companies?—A. Yes.

Q. And knew which ones were getting them from independent companies?—A. Yes.

Q. Did you make the line company dealers sell at a less price than the independent company dealers?—A. Certainly.

Q. You only allowed them thirty cents profit?—A. Yes. We have prices ranging from sixteen dollars to twenty-three dollars, and all of them justified.

Q. Different dealers?—A. Yes, and in the same city.

Q. Depending on what they have paid for coal?—A. Yes.

By Mr. Douglas:

Q. What profit did you allow them?—A. Fifty cents a ton.

Q. What was the profit to the producer?—A. I cannot tell you.

Q. What would you consider a reasonable profit?—A. Honestly, I have never delved into the cost of coal at the mines and I do not know a thing about it, and do not think I am really qualified to say that.

By Mr. Cowan:

Q. The dealers are satisfied at fifty cents a ton?—A. Yes, they seem to be.

By Mr. Douglas (Cape Breton):

Q. What do you allow them for soft coal?—A. Thirty cents. That is the wholesalers generally get their coal in carload lots. Where they deliver it, they have the delivery charge and overhead expenses to consider.

Q. What do you allow them per ton?—A. That depends. Sometimes it will run as high as \$2.30, sometimes only \$1.50. It all depends on the distance of the haul.

Q. That is delivered?—A. Yes.

Q. But I mean overhead, apart from delivery?—A. You mean on the soft coal in wholesale lots?

Q. Yes. You first allow them thirty cents?—A. Yes.

Q. Then you allow them delivery charges?—A. That is where they delivered it from the public sidings to the factories, when they had no storage and had to take it day by day.

Q. You are not referring so much to the coal used in the houses?—A. No, comparatively there is very little used in the houses. Soft coal is not sold largely for domestic fuel, but even with that the same conditions prevail in regard to the dealers overhead, so there is no difference.

Q. Where it is being utilized as fuel in the houses—A. The same conditions obtain, in so far as the delivery is concerned—it is the same work.

Q. Roughly speaking, what allowance did you give for doing business in that case?—A. Well, there are so many factors that enter into that. You take a city like the city of Toronto. A by-law prevents the dumping of coal on the side-walk. The coal must be bagged at the yards, and laid on a truck in bags, and carried on the back to the teamster and dumped into the cellar. That is the law there. You can naturally understand why a certain overhead charge should be allowed, and why the overhead is heavy. In the country districts, that law does not obtain. Now, you take in the city of Toronto the whole thing involves as high as \$3.25 a ton, the whole procedure from the time that coal gets to the siding until it is dumped in the cellar of the consumer.

By Mr. Cowan:

Q. \$3.25 a ton?—A. Yes.

[Mr. Henry A. Harrington.]

Q. Is not Toronto penalizing her citizens very heavily?—A. Not at all. Mr. O'Connor, when he was Fuel Commissioner, went into the costs very thoroughly and he was surprised they could handle coal for that amount.

By Mr. Ross:

Q. That comprises office rent and everything?—A. Yes.

By Mr. Cowan:

Q. Why the bagging of it?—A. Because that is the by-law.

Q. Why the by-law?—A. Because the people trek along after it, and get it on their shoes, and carry it into the homes. We are a clean city in Toronto.

Mr. COWAN: I do not think you are.

By Mr. Ross:

Q. You said the retailers were limited in profits when you were the Fuel Controller?—A. Yes.

Q. No such limitations are in effect now?—A. No.

Q. And the public is apt to be penalized now?—A. Absolutely.

By Mr. McKenzie:

Q. I think we have asked about a great many things that have very little to do with our duties. You said a moment ago that you thought in ten years anthracite coal would become a luxury in Ontario?—A. Yes.

Q. I did not hear the whole of your evidence, Mr. Harrington. Have you any proposals to make to the Ontario people for substitutes for their anthracites?—A. I have made those in the recommendation.

Q. I did not see them. Just in a word, what did you say?—A. I recommended the establishment of by-product ovens in order to ensure a plentiful supply of coke and also—

By Mr. Douglas (Cape Breton):

Q. To be located where?—A. At points to be designated by the people who engage in them.

Q. That is in this country?—A. In Ontario. There is one thing they will have to have a regard for, however, and that will be, as you say, as to the localities, because they are very apt to overlap.

By Mr. McKenzie:

Q. Then you recommend—but where would you get this coal to make the coke?—A. Coke does not require anthracite coal; bituminous can be used.

Q. I am right at home in coke?—A. It is bituminous, consequently there is no question about that. It would be a matter of establishing competition for this business, if it is possible, between home coal and imported.

Q. Would you suggest importing American coal and coking it? That is, bituminous coal?—A. If it can be brought from our home mines, so much the better. If it can be arranged in that way, so much the better.

Q. But you say you have had no experience with the burning of bituminous coal in your furnaces in Toronto?—A. Nothing that would permit me to recommend it yet, excepting the reconstruction of our chimneys and furnaces.

Q. All I have to say to you, Mr. Harrington, if it is any good to you, is that I have been keeping house for thirty years, and am getting to be an old man. I have a furnace in my cellar. I have been burning bituminous coal during those thirty years, and there was never the slightest approach to an accident of any kind and my house was always warm.

[Mr. Henry A. Harrington.]

Mr. DOUGLAS (Cape Breton): I have not been quite that long; I have only been twenty years.

WITNESS: You are certainly to be highly complimented.

By Mr. Cowan:

Q. In the early days, when I was a younger man than I am now, I built houses in Toronto. That was my business, and I know something about the size of the chimneys in Toronto, and something about the size of the chimneys in my own city. Our chimneys are no bigger, and I have been burning soft coal and never had any trouble. We clean them out every fall, it is true, but that is the only thing we do, and I cannot understand why you cannot burn soft coal in the furnaces in Ontario. Down on the farm in Ontario, where I was born, we had a series of old stone-built chimneys of regular size.—A. Were they divided in the centre?—

Q. Some of them would be.—A. As a general rule the farm houses and all houses constructed throughout the country have straight open flues, whereas in the city, they generally divide them. In fact 99 per cent are divided to take care of the furnace pipe on the one side and the kitchen range on the other.

Q. My own opinion, Mr. Harrington, is that the reasons advanced are purely imaginary. I think you will find if the people really get down to it, that they can burn our Nova Scotia or Alberta coal in their furnaces in Ontario.—A. That comes right back to my original recommendation for an extensive educational campaign.

Q. Ontario is clean plumb up against it and the sooner they realize they are a part of this Confederation the better it will be for them.—A. That is it, exactly.

The CHAIRMAN: Since we have the opinions on both sides of the matter, let us divert the witness to the bituminous situation, as far as it affects the industrial life of Ontario.

By the Chairman:

Q. I think you stated the amount that was used by the industries of Ontario.—A. Yes.

Q. Was how much?—A. About 3,000,000 tons for the industries.

Q. You dealt with that somewhat in your statement. Have you anything to add as to the importance of continuing the functions of a fuel controller in the interests of the industrial life of Ontario?—A. Precisely, and I have outlined it to you there.

Q. Will you tell us now in what way—specify some of the methods which you adopted in order to assist the factories to keep going—I mean the practical methods adopted.—A. The one principle difficulty which we encounter in bituminous coal is from transportation during the winter time, and also great dangers arising from labour difficulties at the mines. In either or both of these cases, the probabilities—almost the absolute possibilities of an embargo being placed by the United States authorities exists. This of course, would be in the interest of their home industries. This always obtains. They want to be protected, and one way of protecting them is to prohibit the exporting of any coal from the United States, either to Europe or Canada. It is necessary in order that the industries be protected to have at hand for immediate reference accurate statistics to the amount of coal consumed in each municipality by these various industries, giving preference to public utilities, such as water-works, gas-works, and then to railways; after that we will come to hospitals, and then to public institutions, as far as bituminous is concerned, so that the moment recourse is had by any municipality to the fuel administrator for assistance he is in a position to know at once by glancing at his data as to whether these requirements are imaginary, whether occasioned by panic, or whether they are real. In the latter event, he is in a position by virtue of his authority to get in touch with a municipality

[Mr. Henry A. Harrington.]

which has a supply on hand greater than their requirements for a week or ten days, and secure a supply from them and send it on to the point where it is needed.

By the Chairman:

Q. And that was sometimes done?—A. Yes.

Q. In the absence of a Fuel Controller what would happen?—A. Precisely what happened in the United States.

Q. They would not have that coal?—A. They would not have obtained and would have had to close their industries.

Q. What about the factories?—A. I am speaking of the factories.

Q. I thought you were speaking of hospitals and public institutions.—A. No, we took good care of them, and gave them first call, but in regard to our factories, there was no occasion to close them down at all. We kept them supplied right up to that period when Mr. McGrath secured 500 cars per day.

By Mr. Douglas (Cape Breton):

Q. What would you do if the American supply were immediately cut off?—A. Why, I would be surprised in one way, but I do not think I would be disconcerted. In the first place I would get after all the coal I needed in Ontario, and get busy with Nova Scotia—that is the point nearest home. At a time like that, you understand that price is no object. We must get the coal; the price is immaterial.

Q. What is the price of American soft coal in Toronto now?—A. It runs from \$8.75 to \$9.

Q. Delivered by rail?—A. Yes.

Q. Coming by rail?—A. Yes.

Q. What is it, delivered by water?—A. There is not much difference by water. There would be about 25 cents difference. But we are under a handicap in Toronto; we have really only one dock in the city of Toronto, that has rail connection, and that is the Century Coal Dock Company.

Q. That is run-of-mine coal?—A. Yes, run-of-mine. What happened in this—supposing you have a yard, we will say, within five or six blocks.

Q. I do not think that makes much difference.—A. It does, in this way. You cannot have a car of that kind moved out of that yard to your siding at less than 90 cents a ton.

Q. So you have to add 90 cents?—A. Yes.

Q. So the price of soft coal would be \$8.75 plus 90 cents?

Mr. CHISHOLM: Where?

Mr. DOUGLAS (Cape Breton): Delivered in Toronto.

Mr. CHISHOLM: From where?

Mr. DOUGLAS (Cape Breton): From the United States by rail, but it does not make much difference that way.

By Mr. Douglas (Cape Breton):

Q. What is it for coke?—A. We have coke ovens right on the ground now.

Q. But coke from the United States?—A. Coke from the United States would be delivered in Toronto now at about \$11.

Q. And the 90 cents additional?—A. No, they do not send coke by water. It is all rail. The 90 cents applies to the rail deliveries from the water front to any point in the city of Toronto.

Q. And does not apply to the coke?—A. To the rail coal that comes from the border, 116 miles, at a cost of \$1.15.

[Mr. Henry A. Harrington.]

By Mr. Mackenzie:

Q. Mr. Harrington, there was something I was going to ask you. Do you remember the day when there was duty on anthracite coal?—A. Yes, I remember that.

Q. How long has it been since it was removed?—A. I should judge, that would be twenty or twenty-five years ago.

Q. Did the anthracite get any cheaper because you took the duty off?—A. It happened that the duty went off at the time that the anthracite went up, so that it was about a "setoff."

Q. Did anthracite get any cheaper because the duty was taken off?—A. No, but it was no fault of the—

Q. No explanations at all, no explanations.

The CHAIRMAN: It was the usual result.

By Mr. Mackenzie:

Q. The Americans kept up the price just the same.—A. Precisely.

The CHAIRMAN: Are there any further questions to ask Mr. Harrington?

By Mr. Douglas (Cape Breton):

Q. Mr. Harrington, you take a very gloomy view of the anthracite situation in the United States?—A. I have every reason to.

Q. I think you said there were some hundreds of miles of anthracite there?—A. Four hundred and thirty-two square miles.

Q. What does that contain?—A. As near as we can get to it it is supposed to contain approximately twenty billions—you have the real statistics there?

Q. No, I was working it out as you were speaking.—A. But it figures approximately that the 432 square miles of territory is completely impregnated with anthracite—

Q. Underneath?—A. Underneath. Assuming that under those conditions with the present capacity output it would take one hundred years to exhaust it, but you must remember that is all theory. They are assuming these conditions obtain, which they do not. Take, for instance, the seams of coal. Now, a seam might run probably, we will say, two hundred yards and then they encounter what is known as "fault;" in other words, the miner finds himself choc-a-bloc against granite or blocks, and he is obliged to go out and find out where that seam continues. He might have to go down fifty or sixty feet with his diamond drill before he located a continuation of that seam. That fifty or sixty feet might be rock, slate or clay and consequently there is no coal. All this figures in the possible production there, so taking it all in all together with the necessities of the collieries and the rock and slate to be encountered, and the unproductive portions of the anthracite area, deduction of fifty per cent is within reason, consequently the limitation of direct producing anthracite in the mines has been practically and definitely fixed at fifty years. It may go spasmodically; there may be a little taken out after that period, but there will not be much;—

By Mr. Chisholm:

Q. In view of that is it not your opinion, taking into consideration the increasing population that in a short time the United States will not have any for export at all?—A. I am figuring on ten years.

Q. Therefore it is up to Ontario to get busy and find some place else, and just as soon as the United States finds out that we are wasting our time and doing nothing to better our condition, or provide for the future, the more inclined it will be to take care of their own people first. That is the natural first law.—A. There is no question about that.

[Mr. Henry A. Harrington.]

By Mr. Mackenzie:

Q. Just one thing more. What do you think of the theory or the proposition of heating houses by electricity?—A. I do not think it is feasible. In the first place I do not think it is possible. I think you have statistics on that that will bear me out, that it is not possible with our water-power, or even with the prospective development of our water-power, and the increasing demands for manufacturing uses—I do not think it is possible to develop sufficient electricity to heat our homes sufficiently to do away with the use of anthracite, or do away with the use of any coal.

Q. Have you ever considered the question of supplying heat to houses in community groups?—A. You mean by central heating plant systems?

Q. Yes.—A. Yes, I have given grave consideration to that. Probably we have an example of that in all the large cities of the United States.

Q. How does it pan out?—A. Very good.

Q. Very expensive?—A. The initial expense, of course, is heavy, because it means the construction of a high-powered plant, boiler houses, the installation of mechanical stokers, putting down steam pipes, putting in connections to the various houses that are requiring connections—in a word, the initial expense is very heavy, but after that it carries itself along very well.

By the Chairman:

Q. What is the saving as against the present method?—A. The saving as far as the consumption of coal is concerned is figured at forty per cent.

By Mr. McKenzie:

Q. And you avoid the putting out of ashes and other work in connection with the furnaces?—A. Yes, and your house is clean.

Q. The house is absolutely free of anything of that kind?—A. Yes, but of course it is the initial expense which must be considered.

The CHAIRMAN: Has the committee finished with Mr. Harrington?

By Mr. Cowan:

Q. Just one more question. Your office has been abolished?—A. Yes.

Q. Is there anybody now in an official position in Ontario to warn the people as to the conditions they are likely to face this fall?—A. No.

Q. Absolutely none?—A. No.

Q. If there is a shortage, the Government departments will suffer with the rest?—A. They certainly will.

By Mr. Douglas (Cape Breton):

Q. Do you expect a shortage?—A. I certainly do.

Q. In soft coal?—A. I am referring to hard coal; I am not as pessimistic about soft coal.

Q. How will the production of soft coal this year compare with the production in 1920?—A. Very much depreciated.

Q. Very much less?—A. Yes, in consequence of the lack of demand and the non-existence of contracts.

The CHAIRMAN: I think Mr. Harrington put this in his evidence before you came, Mr. Douglas.

Mr. DOUGLAS: I was at another committee meeting.

The CHAIRMAN: Are there any further questions to ask Mr. Harrington?

We thank you very much for appearing here, and appreciate your evidence.

The committee adjourned until Thursday, April 28, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

THURSDAY, April 28, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.45 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will you come to order, gentlemen, please. We have Mr. Daly present this morning, the President of the Retail Coal Association. We have also Mr. Caspell. I will ask Mr. Daly to come forward.

Mr. JOHN M. DALY called, sworn and examined.

By the Chairman:

Q. Where is your place of residence?—A. London, Ontario.

Q. Your official position?—A. President of the Canadian Retail Coal Association.

Q. How long have you held that position?—A. This is the second year now.

Q. How long have you been connected with the coal trade?—A. About 34 years.

Q. In what capacity?—A. Well, my father started in business and I went into the office.

Q. Always as a retailer?—A. Yes, sir. We always wholesale a little, but it does not amount to much. It would not be necessary to recognize it.

Mr. HOCKEN: Where is Mr. Daly located at?

The CHAIRMAN: London.

Q. What is the membership of your association, Mr. Daly?—A. Why I think it is some three hundred odd, but Mr. Caspell can give you that information. The secretary is here.

Q. The association takes in what territory?—A. Ontario.

By Mr. Cowan:

Q. Why is it known as the Canadian Retail Coal Association if it only takes in Ontario?—A. That was the name that was adopted at first. It was a mistake. It had been adopted a number of years ago. Nobody ever seemed to recognize the fact that it was a mistake.

Q. All right. I was just wondering.—A. Of course, it is Canadian and recognized as such.

Q. Naturally the word "Canadian" embraces the whole of Canada. I was just wondering if it included the other provinces or not?—A. No.

By the Chairman:

Q. You have no statement prepared to present to the Committee?—A. No, sir. I was not aware of what information you wished.

Q. Then Mr. Daly is at the service of the Committee?—A. Yes.

By Mr. Hocken:

Q. Do you get much coal from Port Stanley?—A. Personally my business is practically all anthracite.

Q. You handle very little bituminous coal, but the coal that comes over by Port Stanley is practically all handled by the Lake Erie Coal Company. It is sold retail in London?—A. Both. They sell it. A firm named Woollett has a small yard there. The consumption of bituminous coal is quite small you know for domestic use. It is practically all steam coal.

[Mr. J. M. Daly.]

By the Chairman:

Q. Perhaps you could tell the Committee what are the general methods the retailers of Ontario employ in getting their supply of coal and trace it down from the source of supply until it reaches the retailer.—A. As a general thing dealers have been connected with certain companies. Those companies have always up to the past year been able to supply them. For instance you take a certain firm who would be buying their coal from one of the large companies.

Q. The coal miners?—A. Big companies, the Philadelphia & Reading, the Lehigh Valley, D. L. & W., and the different companies, he would be probably loyal to them and they would be loyal to him. He would buy very little outside of them except in case of emergency in other companies. Some dealers had their trade with probably two or three. Now they would place their order for a certain amount of coal with the understanding that they had to pay the price at the time of delivery each month. Whatever was the price of the month he would have to pay that, while the company would not guarantee—for instance, if a man wanted say 10,000 tons, they would take his order for 10,000 tons but they don't guarantee it although they would give it to him if the conditions were right.

By Mr. Hocken:

Q. Is he compelled to take that amount?—A. Not necessarily, no.

By Mr. Cowan:

Q. You mean they won't guarantee the quantity at any particular price?—A. No.

By Mr. Ross:

Q. You are speaking of anthracite now?—A. Absolutely, yes, not bituminous coal at all. This is anthracite coal I am speaking of.

By Mr. Chisholm:

Q. And they deliver it to you direct, do they?—A. Yes, sir.

Q. That does not apply to all retail dealers?—A. No.

By Mr. Cowan:

Q. You have been dealing with what is known as "line companies"?—A. Yes.

Q. Are those line companies connected with or part of the railway systems over there?—A. They are not now as far as I understand it.

Q. This is on the American side, of course?—A. The United States Government dissolved that.

By the Chairman:

Q. Have you had any special difficulties in getting your supply of coal this last year or two?—A. Yes, very great difficulties.

Q. What were they?—A. Well, the companies that we had been dealing with did not ship to us. We had to go out in the market and buy it from whoever we could get it, and at whatever price we could.

By Mr. Cowan:

Q. With what effect?—A. With the effect that the price was so high that we lost money on all the coal we sold practically at the high prices.

By the Chairman:

Q. Why do they not ship to you?—A. Because they could not, they said.

Q. On account of the scarcity at the mines?—A. Last July I was told that there was practically no coal at Duluth in the Northern boats. They claimed they had to put it on the boats to get it up there before the close of navigation. We have to wait.

[Mr. J. M. Daly.]

Q. You have to wait until they get the northern supply?—A. Yes. That is quite reasonable, because the difference in the freight, in the water and the rail, is so great that if they don't get the coal up there, especially in the Western States, they would have to pay a tremendously high price for their coal.

Q. Are you having any difficulty this year in getting your supplies?—A. Not practically up to the present time, but it is beginning to tighten now.

By Mr. Chisholm:

Q. Mr. Daly, a statement was made here yesterday by Mr. Harrington that in ten years' time he considered we would get no more anthracite coal from the United States. Is that your judgment?—A. I don't think it could be any man's judgment.

Q. He swore to that yesterday?—A. It might be his judgment. He can swear to it if he likes.

Q. He said the quantity of anthracite coal in the United States was limited, and of course the increased demand in the United States for that coal was getting greater every year, and in ten years' time we could not get any anthracite coal from there.—A. He has a great deal more knowledge of it than I have perhaps.

By the Chairman:

Q. What other difficulties have you experienced in getting your supply of coal? What about transportation difficulties? Have there been any?—A. Personally I cannot say that there has been any serious difficulty with the transportation. It always has been moved as far as I have knowledge, considering conditions, in good shape.

By Mr. Cowan:

Q. What lines of transportation do you get your coal over? How does it reach you?—A. It reaches me through Black Rock and Niagara Falls on the Grand Trunk.

Q. It comes by rail all the way?—A. Yes.

Q. Do you know what the freight rate is from the mines to your place?—A. Yes, it is \$5.29 a gross ton.

Q. That is the long ton?—A. Yes.

Q. Do you know what that costs at the mines now?—A. What it what.

Q. The price at the mines?—A. Well, you see, there are various prices at the present time; some companies have not reduced their price, but they have it up to \$8.10. There are a score of different prices; some at \$7.75 up to \$8.10. All kinds of prices.

By Mr. Hocken:

Q. You said \$5 a ton for freight?—A. \$5.29, but you will have to pay New York exchange on \$3.64.

By Mr. Ross:

Q. What does it make it in Canadian money?—A. It depends on your exchange. It may be 13 per cent or 14 per cent or 15 per cent, but it will run about 60 to 65 cents a ton. It will run somewhere around 60 cents a ton. With the exchange on that freight, on \$3.64.

By the Chairman:

Q. What about the exchange?

By Mr. Ross:

Q. If you are buying from a line company—do you buy it by contract? Do you have contracts with a line company usually?—A. They won't make any contract with you the last two years. In fact we don't even get an acceptance of the order these last two years. With some companies you do, with others you don't.

Q. But the usual thing is that you don't?—A. Well you do from some companies

[Mr. J. M. Daly.]

Q. What is your own experience, I mean with yourself? You are a large handler, of course, I appreciate that.—A. My own experience is that I have an acceptance from one company, say, they write down what I wanted; the other company may, although they never acknowledge it, notwithstanding they have been shipping me coal.

Q. If you are dealing with a line company you get the coal cheaper than you do from an independent company?—A. You do, when you get the coal.

Q. What is the average price of coal at the present time per ton from the line company at the mines, of anthracite.—A. I could not tell you positively.

Q. Just approximately. I just want it approximately.—A. It is around about \$7.75; \$7.50, \$7.75, different sizes. Say about \$7.75 I think would be a fair average. Probably the secretary would be better able to tell you that than I.

Q. Is that a long ton?—A. Yes.

Q. That is the long ton?—A. Yes.

Q. And then it costs you \$5.29 and exchange to get to London, Middlesex?—A. Yes.

Q. I mean freight to get to Middlesex, \$5.29 and the exchange would be about 60 cents?—A. I know, but you would have to pay the exchange on the mines price too.

Q. \$5.29, and \$7.75 that is \$10 practically?—A. It will run more than that.

Q. If you put the exchange on it it will run \$11.50. That is what it will run exactly.—A. The coal would average in our place approximately around \$13, we will say, just at the present time.

By Mr. Cowan:

Q. Not including the exchange?—A. Oh, yes.

By Mr. Ross:

Q. Mr. Daly, that is the long ton?—A. No.

Q. That is the short ton?—A. The short ton.

Q. You are right, because the item of \$7.75 and \$5.29 makes \$13, and you put 15 cents exchange on it, you have another \$2, that is \$15, and you take \$1.50 off for the difference between the long ton and the short ton, it will cost you about \$13 a short ton.—A. I might have had those figures for you but I did not know what you wanted.

Q. What does it cost you to deliver in a city like London?—A. It will run—there are no two firms alike. There are no two places alike.

Q. Take a city the size of London?—A. It would average in London, I should say from \$2.75 to \$3.10.

By Mr. Hocken:

Q. A ton?—A. To handle a ton of coal.

Q. That is to deliver from your yard into the cellar?—A. That is the car is or the track. Then you start. You have to unload it; you have to screen a portion of it; you have to bag it, team it. All our stuff is put in bags. We don't sell one ton loose against five hundred in bags. Then we have to sell those screenings all the way from \$2.50 to \$4. That costs probably \$13 or \$14 a ton. Your loss is great there. And your labour and everything. Your gross cost will run it up to that amount. It depends on the condition that man has of handling.

By Mr. Maharg:

Q. Is that exclusive of your overhead?—A. No, that is actual cost.

Q. For the actual work of moving it?—A. Yes. You cannot come at the actual cost of one ton of coal. You can figure from now until doomsday. If a man keep an accurate account of his expenses during the year and an accurate account of the coal he sells, his screenings and everything in connection with it, he has to work it out all on that basis, and there is not one in fifty could do it.

[Mr. J. M. Daly.]

Q. This \$3.10 is your outside figure?—A. Yes.

Q. That covers everything, your rent and light and everything, in connection with your loss in regard to screenings and everything?—A. Yes.

By Mr. Chisholm:

Q. What percentage of that coal is generally regarded as screenings that you sell at the smaller price? What percentage of the ton?—A. I don't believe I can answer that question.

Q. I suppose it varies?—A. Yes.

By Mr. Ross:

Q. What is the retail price of anthracite in London to-day?—A. \$16.50.

By Mr. Cowan:

Q. It costs you \$16.75 according to the figures you have given?—A. No, it costs around \$13.

By Mr. Ross:

Q. But you should add your \$3.10.

By Mr. Cowan:

Q. Everything included?—A. No, but I included the costs when I told you \$13. I included that in it.

By the Chairman:

Q. That is \$13 to deliver at London. Then you have your distribution after that?—A. What I told you, the cost there runs around \$13. No, that is right.

By Mr. Ross:

Q. That is in the car there?—A. Yes, that is right. I beg your pardon.

Q. The \$3.10 has to be added to the \$13 and it costs you \$16.10 before you get any profit?—A. Yes, sir, in many cases.

Q. And you are selling to-day for \$16.50?—A. Yes.

By Mr. Cowan:

Q. That is about 40 cents a ton?—A. Yes. Some, of course, get better than that.

By the Chairman:

Q. Does that apply to all grades of coal?—A. Yes.

Q. Nut, stove and egg?—A. Yes.

By Mr. Cowan:

Q. Do you find the high price now being charged for anthracite coal is deterring the people from using it in Canada and producing a demand for the other grades of coal?—A. Conditions differ. In some localities. Personally we are getting the orders quite fast. In some places they are not getting them at all. Some places are very slow.

By the Chairman:

Q. From your knowledge and experience in the coal business what do you think the prospects are for the coming year in getting an adequate supply of coal into Ontario?—A. I think the prospects are all right.

Q. At present prices?—A. The price will advance.

By Mr. Cowan:

Q. Are the people generally laying in their usual supplies now, the ordinary householder, is he getting in his supply for the season as readily as he has done in

[Mr. J. M. Daly.]

former years?—A. Last year was an exceptional year. People began to buy coal last February up with us.

Q. Why?—A. Because they were warned to get the coal in.

Q. They got good and well scared. They are not being warned this year?—

A. Yes, they are.

Q. To the same extent as last year?—A. Not quite to the same extent.

Q. Who did the warning last year—the provincial Government?—A. The dealers and the Government and everybody did.

Q. Is the Government doing any part of it this year?—A. I have not heard.

Q. They evidently have not been doing very much or you would have heard?—

A. I think I would.

Q. We understood yesterday the Government has cut out its department. What effect is that going to have upon the willingness or the readiness of the people to purchase now?—A. I don't know whether I am competent to express an opinion on what the Government does, but it seems to me that after all the money was spent on establishing the office I would have kept it going if I had to reduce the expenses.

Q. That is what we want to find out, whether or not that department was of any value to the people of that province?—A. I think it was.

Q. You consider it should have been continued. That is your idea?—A. I think so. I base that on the fact that the office had been established at a cost. If it was too expensive it could be reduced. It had a great effect on the people. You can realize that if the Fuel Controller tells the public something as to what they should do they will pay a great deal of attention to him.

Q. I would expect so.—A. Whereas if a dealer tells them, they claim it is a selfish motive.

Q. It is quite evident it is becoming more difficult from year to year to get this coal from the United States. Do you not think the people should be regularly informed on that by the establishment of a department, either provincial or Dominion?—A. I do.

Q. You said a moment ago—A. Excuse me. One thing I want to call your attention to—I don't think you should put this down. Will you permit me to do that? Well, now, I wish you would let me call your attention to this fact without the reporter writing it down. You must realize in the province of Ontario you have a very high class of people.

Mr. COWAN: I know that, I came from there.

WITNESS: The fact is anthracite coal is a luxury to a great extent; there is nothing to equal it for heating a house. We have people that have been accustomed to that class of fuel. It is a very hard matter to change them to anything else and they insist on getting what they want. Now, for instance, there is stove coal. Stove coal is in such excessive demand by the people of to-day that the retailers are not going to be able to supply it. They insist on having stove size.

Q. It means to a certain extent they have to get rid of their aristocratic taste?—

A. Yes, but what I want to call your attention to is that it would be a benefit to us that they should learn to burn the smaller sizes, but the great difficulty is that a man wants to fix the furnace in the morning and he wants to leave it until midnight before he fixes it again.

By the Chairman:

Q. You are speaking of London now?—A. I am speaking of all places.

By Mr. Chisholm:

Q. That is in Ontario?—A. They tell me Quebec is worse. This is a serious matter. We could without any difficulty get any amount of good buckwheat coal that anybody could use half the quantity in their furnace and sell it to them at half

[Mr. J. M. Daly.]

the price they pay for the other or approximately so. They could use pea coal. Anybody can use pea coal in a furnace, but they won't. They will insist on having stove or egg, the stove particularly. Now, that is one of the greatest difficulties we have to contend with to-day.

The CHAIRMAN: You asked that this be not taken down. This is very valuable evidence.

By Mr. Cowan:

Q. I think that is the most valuable stuff we could get. Why do you object to it?—A. Your judgment is better than mine. Put it in if you want to.

By the Chairman:

Q. Would you tell us now what the prices of buckwheat and pea coal are?—A. Buckwheat could be bought today around I would say from \$3.25 to \$4. It is something we don't buy. Nobody will buy it from us. I could not sell a car of buckwheat coal in London in a year.

Q. What would it retail at? I was thinking of retail prices?—A. It would retail somewhere around I suppose about \$11. I could not tell you just definitely. I would have to figure it up. It depends on the rate of exchange.

By Mr. Chisholm:

Q. That could not be used in a furnace?—A. Of course it could. A man could get five tons of the larger size and five tons of buckwheat and use it first rate. But they don't want to attend to it. It is too much trouble.

Q. Why would there be any more trouble?—A. They want to fill the furnace up in the morning and go off and leave it. You have to give it a little more attention that is all.

By Mr. Cowan:

Q. The other day here we had the Hon. Mr. Cote of Alberta giving evidence and he told us about the Government establishing trade commissioners in the province of Manitoba to demonstrate the use of Alberta coal there, and to educate the people there. How would such a system as that work out in Ontario, provided the Ontario Government appointed people just to attend to that work of educating the people. What effect would it have?—A. It would have the effect of getting a great many people to burn the smaller size. You are not speaking of soft coal now, are you?

Q. Whatever coal it is. The more economical use of coal and the proper use of coal.—A. It might be effective and it might not. We tried to demonstrate it to them for years and they don't pay any attention to us.

By the Chairman:

Q. To summarize your evidence on that, you say buckwheat can be bought by the consumer for say \$5 a ton less?—A. Yes, easy.

Q. What about the pea coal?—A. Pea runs higher.

Q. How much higher?—A. Pea would run about \$2 a ton less.

Q. Than the larger size?—A. Stove or chestnut.

Q. Your suggestion is that the consumer using some smaller sizes mixed with the stove and egg effects an economy?—A. Yes, especially in hot water boilers.

By Mr. Ross:

Q. Why in hot water boilers?—A. Well, the system is so different, you see. There is so much open space in the other boiler and you get the fire so much closer to the water and it has to go through the flues. In the other it goes out more and the firepot of a hot air system is usually larger than the firepot of the hot water boiler.

Q. So that what you say is pea and buckwheat coal if properly mixed with egg or stove coal will work quite practically in a hot water boiler particularly?—A. Yes,

[Mr. J. M. Daly.]

it will work, for instance, if they use any judgment. Take the colder weather, if they find they don't get enough heat they can use their large coal. On mild days every night they should throw the buckwheat on the larger coal at night and leave the fire until the morning. There is no fire without oxygen, without the air you cannot make anything burn. The finer coal of course being more dense excludes the air, but it will hold the fire longer.

By Mr. Cowan:

Q. Did I understand you to say in an ordinary house equipped with hot water heating apparatus they had to heat with anthracite coal?—A. Yes.

Q. That is a horrible waste of money. I never think of doing it at home. Out in Saskatchewan we have almost as cold a climate as you have in Ontario?—A. That would not be a good reason for that.

Mr. COWAN: We use steam coal and we have no trouble with it at all.

WITNESS: I should say necessity had a lot to do with it.

The CHAIRMAN: You cannot get any other doctor.

By Mr. Cowan:

Q. If I had my choice I would take the steam coal for that kind of a furnace. The hot air furnace might be a little different. We never think of using anything else?—A. Your apparatus of course is built to burn soft coal.

Q. The steam coal we use there is just as fine as powder?—A. It is slack.

Mr. COWAN: We get it by the earload and throw it in. We might have to go to the lever in the middle of the day and shake it down and that is all there is to it.

WITNESS: I quite agree with you.

Q. Why could not the people in Ontario do that?—A. They can if they are forced to.

Q. All right, that is a waste of money that is all.

By the Chairman:

Q. Have you anything to say on the use of substitutes for anthracites? You have spoken of the smaller sizes. What about the use of coke in London?—A. Coke is a good fuel, yes.

Q. Is there much available?—A. Well, considerable, yes. There is quite a bit of coke brought in there. The City Gas Company used to sell about 10,000 tons until the past year when soft coal was so high that they had to use a great deal of it themselves.

Q. And some imported?—A. Yes, quite a lot.

Q. At what price was it sold?—A. I don't know. It usually runs around, oh, from \$1.50, somewhere around there, less than the other.

Q. Just enough to be a little attractive to the consumer who wants to save?—A. Yes.

Q. Is it worth within as much as \$1.50 of anthracite?—A. I don't want to express an opinion on that because I am very much prejudiced on the value of anthracite coal, and that has been practically my business, you see.

Q. You don't as a matter of fact know whether that would be a fair difference between the two or not?—A. I don't think it would be fair for me to express an opinion on it. We have manufactured coal called boulets, about the size of an egg, manufactured from a high grade anthracite, coal screenings and a very high grade oil.

Q. Is that what you call Nukol?—A. No, thank you. It is a different thing altogether.

Q. What do they call it?—A. It is made by the Lehigh Coal and Navigation Company and they built a new plant costing \$400,000, and there is not any stock for sale either. You are not putting that down.

[Mr. J. M. Daly.]

Mr. McKENZIE: Oh, yes, everything goes down?—A. It is a very excellent fuel. Now they have a little spiral and the screenings are put into this spiral from the mines and it is the highest grade of anthracite and that thing whirls all the time and throws all the dust out and they get very clear particles of coal. They would not make it for a year because they could not get the oil. The oil is heated to a very high degree and it is mixed up into a mortar; it goes on to the machine and comes out in the shape of an egg. It is about the size of an egg. That will stand the weather the same as anthracite coal. You can throw it out in the weather and leave it there all winter and it is just as good in the spring.

By Mr. McKenzie:

Q. It is a briquette, is it not?—A. No, I am speaking about the boulets. There are briquettes. There are seven or eight of them, I understand. I know nothing about them. I am telling about boulets.

Q. It is on the same principle as the briquettes?—A. The same principle, yes. It is the old Dutch process in a way. It is good fuel but our people are so extremely sensitive that when this starts to burn the oil will give off a little smoke and a little bit of odour that is nothing, but because of that they won't have it.

By Mr. Ross:

Q. That would not come from a hot water furnace, would it? You would not get any there, would you?—A. No, except you open the door.

Q. What does that sell for a ton in London?—A. I should say it has been pretty high. We have been selling it at a loss.

Q. What have you been selling it at?—A. \$16, but this coal was bought in December.

Q. What would it be sold for under normal circumstances?—A. I have not asked the price of it lately. We did have it down to \$14. I don't know what their price is now, but you must understand this, this stuff is the best of the lot. They have the exclusive sale of it, and the demand for it is tremendous. They won't give you any hardly. Now it is all sold on the other side, most of it, although there has been considerable of it coming here this winter. That stuff will burn as long practically as our coal and retain its shape until it will crumble into ashes, and you get like wood ashes.

Q. Has it as good heating value as hard coal?—A. Not quite. There is no coal that has as good heating value as hard coal, nothing. But it is the next best thing. But the people will not buy it as long as they get anthracite coal in Ontario.

By the Chairman:

Q. There would be no great advantage in buying it, would there, according to your story? It is practically the same price as anthracite and not as good.—A. No, it won't be now. I could not tell you what price we got in December, only we had a difference of between \$3 and \$4 a ton between it and the anthracite. We sold it like fun. We couldn't get it fast enough. But as soon as the price gets closer they won't buy it.

By Mr. Chisholm:

Q. Where is it sold now, you say?—A. It is made by the Lehigh Coal & Navigation Company. The sales agent is in Buffalo.

Q. Is it manufactured on this side?—A. No, it is manufactured right down at the mines.

By Mr. McKenzie:

Q. Is there any duty on it?—A. No, it is anthracite coal.

Q. It is the same as anthracite?—A. It is anthracite, the whole basis is anthracite coal.

[Mr. J. M. Daly.]

Q. What enters into it besides the coal?—A. Oil.

Q. What kind of oil?—A. I don't know.

Q. I suppose it is crude oil?—A. Yes, they heat the oil.

By Mr. Cowan:

Q. It is really a briquette?—A. We will insist that it is a boulet. The briquette is a different shape.

Q. That is all the difference?—A. It is the same principle.

By Mr. Chisholm:

Q. There is this much difference: briquettes are usually made of bituminous coal, and this is made of anthracite.

Mr. COWAN: No, no.

By Mr. Chisholm:

Q. Briquettes?—A. You cannot tell what they are made of, but we know what the boulets are made of.

The CHAIRMAN: Anything else you wish to ask Mr. Daly? The secretary of the association is here and we have one of the local coal dealers here.

Mr. COWAN: All the evidence we have had so far goes to show that it is certain that the price of American anthracite is going to keep on increasing and increasing and in a very short time the United States Government will come to the point where they will not be able to supply foreign countries.

WITNESS: I don't believe that.

Mr. CHISHOLM: That is very important now.

WITNESS: I think the present conditions are the result of the war. When things become normal again you will find the coal business normal too.

Q. There was evidence given here yesterday by a man who pretended to be an expert. He said positively here that the supply could not last any more than ten years, and gave us physical reasons.—A. My opinion is only worth what I give it for, but that is my opinion. I don't know how long the coal will last or anything about it.

By the Chairman:

Q. As a matter of fact you have no accurate knowledge of it. It is just an opinion you have acquired?—A. It is just an opinion. I don't feel that way at all.

By Mr. McKenzie:

Q. Your business is catering to the people in supplying fuel?—A. Yes.

Q. Supposing it to be true what Mr. Harrington told us yesterday, that in ten years you cannot get anthracite, in what direction would you look for fuel? What would you do to keep up your business and meet the interests of the people with fuel, provided it is true that in ten years you cannot get any anthracite?—A. The people would have to burn soft coal.

Q. Where would you get it?—A. From the United States and Canada, and there is soft coal in practically every state in the Union except the New England states, any amount of soft coal. They might do like the doctor does; anybody can burn soft coal. They can heat their houses and everything all right. All that will happen is a return from the luxury of hard coal to soft coal. That is the whole thing. I told you a moment ago we had a discriminating people who insist on the best and they don't care what the price is.

By Mr. Chisholm:

Q. Oh, yes, they do. I don't see why we are here then.

[Mr. J. M. Daly.]

Mr. COWAN: I think there is a certain amount of truth in that. Our people are a whole pack of blockheads.

The CHAIRMAN: Are you speaking now of Saskatchewan, Doctor?

Mr. COWAN: It is the truth. I say the whole of the Canadian people will give you illustration after illustration. They want the best, the very best, regardless of what it costs them, and that is the big trouble to-day right in Canada.

By Mr. Hocken:

Q. Have you got any knowledge of the economy that would be effected by establishing a central heating plant?—A. Well, only the past experience they had in London a great many years ago.

Q. What was that experience?—A. The men that started it lost their money.

Q. What was the coal then?—A. The coal was—well, I suppose, they got soft coal in London at that time at about \$4 a ton, everything paid.

Q. Was there any reason for that, or what do you think of the plan? Have you any knowledge of the possibilities of such a plan?—A. It is out of my sphere. I think it might be feasible enough in a business district. It is where your plant can supply a radius of a block or two, I think it is quite feasible. We have one in London and they are paying a great deal more than they can heat their premises for themselves with hard coal.

By Mr. Ross:

Q. You said a moment ago, I think—A. Now, listen, that should not go down. I don't want to get into trouble.

Mr. COWAN: We are not going to get you into trouble.

The CHAIRMAN: It all goes down.

WITNESS: See that you keep it to yourselves.

By Mr. Ross:

Q. I think you said that you thought the coal situation at the present time was abnormal, and when we get settled down again, we would get back to old times. Do I understand you to mean we will get back to old prices?—A. Never.

Q. What do you mean?—A. That we will get back to around \$12 a ton.

Q. For anthracite?—A. If the Chairman will permit me—shall I tell them? You want information?

Q. Sure we do.—A. Here I am staying too long already. I will have to get out of here. We are suffering to-day from a price of \$5 that was made probably twenty or twenty-two years ago. We sold coal in London for \$5 that cost five dollars and fifteen cents on the track before we touched it. I lost ten dollars to a man on this very same thing. One of our prominent lawyers told me that he bought his coal for four and a half, and I said he did not, and I offered to bet him ten dollars that he did not buy it at that price, and I lost the bet. When coal was five dollars a ton it should have been six dollars and a half, labour and everything being cheaper, at that time, you understand. When it was selling at seven dollars, it should have been nine dollars, consequently the normal price would be somewhere around twelve, or thirteen or fourteen dollars. That is where the great difficulty is. Probably you do not want to hear these things, but these are the facts.

By Mr. Mackenzie:

Q. Did you take advantage of the war to put the price up?—A. We never took advantage of anybody since we have been in business.

Q. How did you manage to jump from the level you spoke of up to the high price it is to-day?—A. Because we paid fifteen dollars a ton for coal at the cars;

[Mr. J. M. Daly.]

we paid \$5 29 and we paid eighteen and a half per cent to pay for it; it costs us \$20.87, and we sold it for twenty-two dollars and we robbed them.

Q. What I want to know is this: Your price has been going on an even keel for many years?—A. It has never been on an even keel; it is varying all the time.

Q. It has been pretty much the same price?—A. No.

Q. What did you mean about this five dollar price of which you were speaking?—A. That was a war in the city of Toronto.

Q. How long did it continue?—A. Until the wholesalers came over and said if they did not stop it, they would stop sending in coal.

Q. What has given this impetus to the price which has gone up to where it is to-day?—A. I told you before.

Q. Tell me again?—A. The effect of the war that exhausted all the stock piles.

Q. Oh, so the war has put up the price, whosever fault it is. Why did you not answer me correctly?—A. I did not understand what you wanted.

Q. In other words, somebody has taken advantage of the war to put the price up?—A. Well, it is the jobbers.

Q. And you have fallen into it delightedly to keep the price up?—A. Why should we fall into it to lose money?

Q. That is what you are going to do?—A. Why should we fall into that to lose money.

Q. Under these big prices you are making money?—A. I tell you we lost money on all coal we sold at high prices.

Q. But you will never go back to the old prices?—A. We never made any money on them. The only money we could possibly make was on line coal; on the independent coal we lost money.

Q. All I know is that somebody had put up the price.—A. Yes, the jobbers.

Q. And it stays there?—A. No it came down.

Q. How much?—A. We reduced that coal down to twenty dollars; we reduced it to seventeen dollars and a half; then the new price came in and coal at present is selling at a price of sixteen dollars and fifty cents.

Q. Do you think it will stay there?—A. I do not think so.

By Mr. Cowan:

Q. Do you think it will come down this fall?—A. No, I think it will go up.

Q. But people have the impression that it will come down. Do you think it is advisable to take some steps to remove that impression?—A. I do not think that people have that impression.

Q. Why are they not laying in their stocks?—A. There are different circumstances; I suppose some of them have not the money.

Q. That usually obtains to a certain extent?—A. Then too, the shipping companies are much more stringent in their demand for payment than they were. They want their money right off; some of the companies insist on getting it twice a month. They have tightened right up. The dealer has got to get money from his customers; he cannot afford to carry them.

Q. Are the banks carrying you?—A. They always do, yes. I presume they carry everybody.

The CHAIRMAN: Might I point out to the Committee that I think there is an arrangement between the President and the Secretary of the Association whereby each shall have an opportunity of giving evidence along certain lines, so there will be no conflict. There will be no restriction whatever to the question the Committee may ask, but there are certain matters which they have agreed the Secretary could speak on better than Mr. Daly. I simply point that out for the information of the Committee.

WITNESS: Mr. Chairman, I will fix that up. Let him go ahead.

[Mr. J. M. Daly.]

By Mr. Ross:

Q. There is just one further question I would like to ask you, Mr. Daly, on a question of policy. You are the President of the Retail Dealers Association?—A. Yes.

Q. You know they all buy individually? You do not buy as an association?—A. I do not.

Q. You know they all buy individually?—You do not buy as an Association?—A. No.

Q. What I am trying to get at is this: Could not there be some method adopted by the Association as a body, whereby they could make large contracts and agree to divide up the coal amongst themselves? Would this not enable you to get your coal cheaper?—A. No more than you could throw a piece of meat to a pack of lions; the biggest one would get the whole chunk.

Q. Has that ever been tried?—A. You do not know them.

Q. You mean I do not know the retail dealers? Or the other chaps?—A. You do not know any of them.

Q. Do you mean they are all bad?—A. Is that all you want to know, Mr. Ross?

Q. I am asking you if that is a practical question?—A. No.

Q. Why?—A. Because you would not get any three of them to agree on anything.

Q. You mean three of the retail dealers?—A. I do.

Q. Then it is impracticable from your end?—A. To be serious with you, they do not want to lose their individuality; a man who wants his business wants his business, and he does not want to be mixed up with half a dozen other men.

By Mr. Hocken:

Q. Does he feel safer with his own connections instead of joining the pool?—A. I think he does. I think the basis of every nation is a man's individual efforts. I am strongly opposed to fraternalism or anything of that kind.

By Mr. Ross:

Q. I suppose some of the retailers are in a stronger position than the others?—A. Mr. Ross, I might mention that has been tried in a small way between three or four or five of them, and it has always broken up in a row.

Q. But if taken up as an association matter?—A. No, I do not think it is of any benefit at all. I can tell you of many cases. A weakness of the trade is that there are too many in the business. You cannot stop a man from going into the business, but there are too many in the business. You have men in the hardware business selling coal, who do not know what the coal cost them, and this causes a lot of trouble.

You will excuse me, Mr. Chairman? I think I have given you enough.

The CHAIRMAN: Is the Committee through with Mr. Daly?

WITNESS: I beg of the Committee to be through.

The witness retired.

BERT A. CASPELL, called, sworn and examined.

By the Chairman:

Q. What is your official position, Mr. Caspell?—A. Secretary-treasurer of the Retail Coal Dealers' Association.

Q. How long have you held that position?—A. Some eight years.

Q. You are in the coal business?—A. Retail coal business in Brantford.

Q. How long have you been in that?—A. Seventeen years.

[Mr. B. A. Caspell.]

Q. Can you give us the membership of your association?—A. Four hundred and thirty-six.

Q. Distributed throughout?—A. Distributed throughout the province of Ontario, from Fort William to Ottawa.

By Mr. Cowan:

Q. Have you any idea of the proportion of the coal dealers which are included in your membership?—A. We have about one-half of the so-called coal dealers of the province in our membership. Figuring it from a tonnage standpoint, I would say that we have about seventy-five per cent.

By Mr. Hocken:

Q. What are the objects of your association?—A. I have a little booklet here, Mr. Chairman—

By the Chairman:

Q. You had better state the objects.—A. I will just read this declaration of purposes and aims and objects of the Canadian Retail Coal Association.

"We realize the convenience if not the necessity of the retail coal merchant in every community, and we are interested in the promotion of the general welfare and the perpetuation of the retail coal business.

"We seek to promote the social and intellectual improvement of the retail coal merchants, by calling them together in conventions and business meetings for interchange of ideas, for discussion of topics of common interest, and for the cultivation of a closer personal acquaintance and friendship.

"We recognize the absolute right of every person, partnership or corporation to establish and maintain as many retail yards as they or it may see fit.

"We also recognize the disastrous consequences which result to the legitimate retail coal merchants from direct competition with producers and shippers; and appreciate the importance to the retail merchant of accurate information as to the nature and extent of such competition where any exists.

"And recognizing and appreciating the advantages of co-operation in securing and disseminating any and all proper information for our mutual convenience, benefit or protection, we have organized this association and have adopted the following articles for the government of our affairs."

You do not wish me to read the Articles of Association?

The CHAIRMAN: No, I do not think that is necessary.

By Mr. Hocken:

Q. Is there any idea of your getting together in order to get the price of coal down?—A. That is one thing we do not discuss—the retail price.

Q. You get together socially?—A. We do talk over the costs of doing business to arrive at a little—Mr. Daly has gone back twenty-five years and told you about men selling coal at five dollars a ton. The trouble has been that a great many of the so-called retail coal dealers are simply handling coal as a side line; it goes into the whole of their general merchandizing, and if they make a profit on the year's business, all well and good; they do not know whether they have made a profit on the coal end of their business or not.

Q. Are these men members of your association?—A. Some of them, yes.

By the Chairman:

Q. Will you tell us of any difficulties which the retailers have in getting a supply of coal—any which have not been mentioned by Mr. Daly?—A. I do not know of anything he has not touched upon, in the securing of supplies.

[Mr. B. A. Caspell,]

Q. I have been told that retailers in order to get shipments of coal are frequently forced to buy from brokers or commission agents, perhaps in Buffalo, and their impression is that the shipment of coal passes through the hands of several commission agents between the mines and the retailers. Have you any knowledge of that?—A. I cannot state definitely how many hands it passes through. To give you some idea of the variance of cost; our costs last year from the line companies was about eight dollars and ten cents per ton.

By Mr. Cowan:

Q. Where?—A. At the mines. The cost of some of the coal shipped by jobbers and brokers is as high as fifteen dollars per ton at the mines. It must have surely passed through a good many hands to make that difference in price.

By the Chairman:

Q. What would be the source of that coal—independent companies?—A. Some independent companies.

Q. The line companies do not handle their coal in that way?—A. No.

By Mr. Hocken:

Q. Did they sell that coal in competition with the eight dollar coal?—A. There was no eight dollar coal on the market.

By Mr. Cowan:

Q. It was all under contract? The line coal was under contract?—A. Under contract?

Q. Yes.—A. They do not make any contract price.

Q. No, but what I mean is that the line companies' coal which was sold at eight dollars and ten cents was all sold under contract, is that correct? Contracts entered into before?—A. I presume so, yes.

Q. They cannot supply anything additional, and these people had to go out—A. Of course, you understand that during the period of the war and while the fuel control was on in the United States, there were certain orders issued by the Fuel Controller which necessitated the shippers cutting off Canada to a large extent, and two or three companies shipped very little coal into Canada during that period, because of the orders they received to ship their coal to the New England States or some other sections of the United States, with the result that we had a shortage, and the brokers and jobbers and independent operators took advantage of that shortage absolutely.

By Mr. Ross:

Q. That was last year?—A. Last year it reached the high level.

Q. But that will recur soon if there is a shortage there every year?—A. Yes, for instance, I may state right now—some mention was made of a shortage on stove coal. The line companies' price on stove coal at the present time is seven dollars and seventy-five cents, I think it is, and one line company still maintains the price of eight dollars and ten cents at the mine, but seven dollars and seventy-five cents is the price being quoted by a majority of the line companies.

By Mr. Cowan:

Q. Is that anthracite?—A. Yes, anthracite stove coal; I am referring to anthracite only. The jobbers to-day are asking eight dollars and fifty cents, a difference of seventy-five cents a ton—an increase of seventy-five cents a ton. They have taken advantage of the situation already.

[Mr. B. A. Caspell.]

By the Chairman:

Q. That is, some shippers are prepared to deliver to the retailers in Ontario at—A. Eight dollars and fifty cents.

Q. Eight dollars and a half a ton?—A. Yes.

By Mr. Hocken:

Q. There must be a tremendous profit for the coal operators, at eight dollars and ten cents a ton?—A. I do not know anything about that.

Mr. COWAN: Have you any witnesses on that, Mr. Chairman?

WITNESS: I think the United States Government has been trying to find that out for about twenty-five years, and has not done it yet.

By the Chairman:

Q. Mr. Caspell, you remember that the price jumped, from about fifteen dollars and a half and sixteen dollars last summer up to twenty-one and twenty-two and twenty-three and twenty-four dollars last winter?—A. Yes.

Q. Can you tell us the cause of that?—A. That is covered by the statement that you made some time ago regarding the difference between the line companies' price and the jobbers' price—between eight dollars and ten cents, and fifteen dollars, and as a result of being cut off from our source of supply by priority orders issued by the Fuel Administration of the United States.

Q. There was an urgent demand for coal in Ontario and there was a scarcity of supply at the other end, and you were thrown into the hands of the jobbers?—A. Yes.

Q. Any difficulty in getting coal in that way?—A. Yes.

Q. Is there a possibility of that occurring this year, in your opinion?—A. Well, it is a difficult situation to figure out. I hardly look for such an increase, such a marked increase—such a marked difference, rather—at the present time those who are able to lay in their coal are trying to do so, at least in some sections. I would like to emphasize this fact for the benefit of the Committee that if there is any possible chance, or any opportunity offered by the Committee to urge upon the Committee to lay in their coal at the present time, you should do so. In some sections they are not buying at the present time, and unless the people buy, the dealer cannot lay in the coal; they cannot stock up coal; very few of them can stock more than for a month or two at the outside.

Q. Why?—A. They have not the capacity,—Mr. Daly has made mention of that—the operators likewise are not able to stock any more apparently, on account of the high cost, and unless the consumers will take in the coal, the dealers cannot buy it, or cannot get in their coal, and it goes right back to the operators who cannot operate, and the miners cannot work unless they have the cars moving all the time. The result of that is that the situation to-day, as you are all possibly aware—is that a good many mines are closed down for lack of orders.

By the Chairman:

Q. Are the conditions here very favourable to a repetition of the situation?—A. Very favourable.

By Mr. Cowan:

Q. What is being done to acquaint the public of that fact?—A. I do not know of anything.

Q. The Retail Merchants have not done anything?—A. No.

Q. And the Government has quit?—A. The Government has fallen down.

Q. Do you think the Government should have quit—that is the Ontario Government?—A. It looks to me as if we would have transportation troubles this winter, and our situation will then be fully as serious, if not more so.

[Mr. B. A. Caspell.]

Q. So if the people of Ontario freeze this winter, the Provincial Government will be largely to blame for it?—A. As an Association we have urged the Government to continue the office of fuel controller.

By the Chairman:

Q. As a retailer can you tell what benefit you would expect to derive from the continuation of the Fuel Controller's office?—A. Well, really in our local market in Brantford, the Fuel Administrator's office has been of very little use, because we have been fortunate in getting our supply. We have been linked up with a good many companies, and I think Brantford has fared better than, or at least as well, as any town in the province, but I think you will find in the smaller towns that Mr. Harrington has done a great deal in diverting coal and securing coal for the smaller dealers, who have not been linked up with the line companies, or with a good company who could give them the coal they wanted. I believe Mr. Harrington has done a great deal along that line, and I believe that as far as soft coal—bituminous coal, is concerned, that he has done a great deal to keep our manufacturing establishments going, and diverting coal to points where it was needed.

Q. The retailers in the smaller towns are not in as advantageous a position to get in touch with the producers on the other side, and are entirely at the mercy of these brokers, who are prepared to rob them if their demand for coal is urgent enough?—A. The conditions in earlier years have been such that the line companies have not had to seek for a market for their coal, and they would not take on any new customers.

By Mr. Hocken:

Q. As an Association, did you last year adopt an advertising campaign?—A. We did, in conjunction with the Toronto dealers.

Q. Will that be repeated?—A. Not that I know of

By Mr. Chisholm:

Q. Was it effective?—A. Very effective.

By Mr. Hocken:

Q. Why not repeat it?—A. Cannot afford it.

By Mr. Ross:

Q. Would it not pay you? Did it not pay you last year? Did it not help you to get your supply distributed regularly?—A. I do not know. I do not suppose we lost any money by it.

By Mr. Cowan:

Q. People have to come to you any way sooner or later and buy the same quantity of coal?—A. Yes.

By Mr. McKenzie:

Q. Do you think the buyers are on strike? Are they holding back in the hope that prices will come down?—A. I believe so. I believe that has had a lot to do with it.

By Mr. Chisholm:

Q. And the fact is that you expect the price to go up?—A. Yes, the fact is it has already gone up, and on the 1st May, the line companies' price goes up ten cents per ton.

By Mr. Douglas (Cape Breton):

Q. And then goes up gradually?—A. Yes, goes up gradually.

[Mr. B. A. Caspell.]

By the Chairman:

Q. Have you not found in recent years it has been the condition each year, that on account of the high price the consumer hesitates to buy?—A. No.

Q. There has been a great deal of complaint in recent years along that line?—A. We have not had any difficulty in securing orders up to this year, but this year there is a sort of depression; I do not know what it is.

Q. Perhaps they still have some in their cellars this year?—A. Possibly.

Q. Reserve stocks?—A. Yes.

By Mr. McKenzie:

Q. How many cities would you say you are familiar with in connection with the Association? You live in Brantford?—A. Yes.

Q. Of what other towns and cities in your neighbourhood have you knowledge of local conditions?—A. Oh, I think that is a fair sample of them all.

Q. Do they all belong to your association?—A. Practically all of them are represented. There is a list of members in that little book.

Q. You do not include the city of Toronto?—A. Yes.

Q. You do?—A. Yes.

Q. Take the city of Toronto, can you tell the Committee how many local dealers there are in the city?—A. How many in the city of Toronto?

Q. Yes.—A. At the present time?

Q. Yes.—A. If I remember rightly in the neighbourhood of forty, so-called, whom we call regularly established dealers. Of course, you understand, sir, that a firm like the Elias Roger Company or the Standard Fuel Company, and several more, have several Branch offices and yards.

Q. I am asking you about the people who deal in anthracite coal?—A. Yes.

Q. There would be about forty of them?—A. Yes.

Q. What would be the average stock of those forty, for the whole year? How many tons do you think it would be?—A. That they handle on the average?

Q. Yes, take one with the other?—A. I would not like to strike an average. The Elias Roger Company handle a quarter of a million tons.

Q. Do you know anything about the prices in Toronto?—A. I do not know what they are selling at this year.

Q. What about last year?—A. The price last year, I believe, was seventeen dollars and a half—that was about as high as they went, or eighteen dollars; that is for the line companies' coal.

Q. That is delivered in the cellar?—A. Yes, for line companies' coal; the high priced coal went as high as twenty-two dollars.

Q. Was the price uniform?—A. No.

By Mr. Hocken:

Q. Some dealers charged more than others?—A. Yes; it was not uniform. Take our own city—

By Mr. McKenzie:

Q. I am speaking about Toronto altogether.—A. I beg pardon.

Q. Take Toronto. What about Toronto?—A. I do not know much about that.

Q. Do you know anything about the variety of prices; were they all the same?—A. They were different; they were not uniform; some companies never went higher than seventeen dollars and a half, while some companies went as high as twenty-two dollars at least. I had that information direct from Mr. Harrison, who is a past President of the Association.

Q. You say there is a variation of prices in the city of Toronto?—A. Yes.

[Mr. B. A. Caspell.]

Q. For the same class of coal?—A. For the same class of coal, but bought from different sources; one bought from line companies, and the other from the jobbers. I might say that while it is supposed to be the same class of coal, it is very often a cheaper coal that is, of a poor quality.

Q. Before we leave Toronto: What does your association do in connection with the adjustment of prices?—A. Nothing.

Q. You mean to say there is no common ground?—A. Nothing whatever, sir.

Q. You talk about the prices?—A. Nothing whatever, sir. We, as an association, have never done anything to regulate the price of coal, or set the price of coal in any market.

Q. You say that at your gatherings or meetings the price of coal is not discussed at all?—A. No, sir.

Q. What is that?—A. No, sir.

Q. And the purchase price is not considered at your gatherings?—A. No, sir. The only item, as I have explained, is the cost of doing business. That is very often discussed, but there was never any arrangement between the dealers as to what the price should or should not be.

Q. Of course I would expect you to say that anyhow.—A. We have a verbatim report of our minutes.

By Mr. Cowan:

Q. There is no gentleman's agreement?—A. There may be a gentleman's agreement between dealers in their local market.

Q. You would not be a party to it?—A. No.

By Mr. McKenzie:

Q. What is the difference between local markets and the other people who sell coal in one city, are they not all local men?—A. Yes, but we as an association have nothing to do with the arrangements in the local markets.

Q. I do not understand that. Everybody who sells coal in a city or town has a local market?—A. Certainly.

Q. Would not some of the members of your association be regarded as local market men?—A. Certainly, certainly.

Q. And you say that some of those may have an arrangement amongst themselves, as to price?—A. Certainly, but that does not commit us as an association, to it.

Q. Members of your association amongst themselves agree as to the uniformity of price?—A. I presume so, along with others who are not members.

Q. The same thing happens as if the association knew about it—members of the association—whether they have been doing it as member of the association or not—they have got together and agreed upon a uniformity of price—that is practically a combine?—A. We know nothing of it as an association.

By Mr. Hocken:

Q. It may not result in that.

By Mr. McKenzie:

Q. They do not enter that on the minutes?—A. The officers of the association know nothing whatever about it.

Q. I am not saying that they do, but you stated that the people who are members of your association get together on the side?—A. I did not say they did it; I said possibly they did it.

Q. Do you not know?—A. No, I do not know.

[Mr. B. A. Caspell.]

By Mr. Hocken:

Q. You have no understanding among the local dealers in Brantford?—A. The prices there to-day vary from fourteen dollars and a half up to sixteen dollars.

Q. For the same quality of coal?—A. For the same quality of coal.

By Mr. Chisholm:

Q. Is this variation connected in any way with the variations in the cost of coal?—A. No, I believe not.

Q. I mean that you and I might go into the United States to buy coal and for some reason or other you bought it at four dollars a ton cheaper than I did, then we came over here and you were able then to sell it at four dollars a ton less than I could; that is not the case?—A. No.

By Mr. McKenzie:

Q. I cannot understand the purpose of the association of coal dealers. I will be perfectly honest with you—I do not understand the excuse you have for existing at all unless it is to discuss and arrange the price of the commodities, which they sell. What do they get together for?

Mr. COWAN: Does your legal profession ever get together?

WITNESS: Well, for instance, if I tell you that last year we, as an association, appeared before the Board of Railway Commissioners of Canada to fight against the proposed increased freight rates, and that I believe it was through our urging upon the Railway Commission not to increase these freight rates that we saved the people of the Province of Ontario half a million dollars, would we not be of some use as an association?

Q. Oh, yes, certainly; but you get your name from your business?—A. Certainly.

Q. That is the style of your association, and that is the purpose of your association? I would think that the purpose would be to safeguard and promote the interests of your business as coal sellers. I am not going to cross-examine you, I have no business to, but you say the price of coal is not discussed at all?—A. Absolutely not, sir. Our annual meeting was held in Toronto on the 6th and 7th April, and I do not think I heard the price mentioned once at that meeting.

By Mr. Ross:

Q. Were the purchase prices discussed?—A. I do not believe that the subject of prices entered into any discussion at that meeting; I cannot recall it.

By Mr. Chisholm:

Q. The fact is that you avoid it?—A. Yes; we keep away from it. It is against the criminal law to combine together, as you very well know.

By Mr. Douglas:

Q. I suppose the costs vary greatly?—A. It will, between one town and another.

By Mr. Hocken:

Q. They will vary from one town to another?—A. I have a little book here. This statement is not my own. This is an item taken from "The Retail Coal Man," a magazine published in Chicago. There was a gentleman speaking, Mr. Theodore Hazelwood, of Lowell, Mass., who said:—

"Coming to the cost of distribution to the ultimate consumer, we have gathered from eight of the leading coal merchants of the Merrimac valley, at Manchester, Nashua, N.H., Lowell, Lawrence, Haverhill, and Newbury Port. figures compiled wholly independent of one another, showing the cost of doing business for the past year, including degradation to be from three dollars and thirty-two cents to four dollars and forty-one cents per ton."

I mention that to show you the difference between one town and another.

[Mr. B. A. Caspell.]

By Mr. Douglas (Cape Breton):

Q. Have you any idea of what it costs to do business in the different towns in Ontario?—A. No.

Q. Your association does not keep statistics on that?—A. No.

Q. Have you a uniform system of accounting?—A. No.

By Mr. Cowan:

Q. We have been discussing here quite a bit the prospect of getting Nova Scotia coal into Ontario, especially into Eastern Ontario, which is considered as possibly a natural market for Nova Scotia coal. Your organization is composed of men who handle anthracite almost entirely?—A. Yes.

Q. Would their influence be thrown against the introduction of bituminous coal?—**I would not like to say.**

Q. Would it be against their interests?—A. I do not like to say. I do not believe it would. I do not see why it would.

Q. If it were shown to be profitable to them to handle it, do you think they would be willing to handle bituminous coal from Nova Scotia, together with the anthracite?—A. I do not see why they would not.

Q. Would the present plants permit it?—A. No.

Q. They would have to have additional plants?—A. Yes. In a good many cases the elevators, as now constructed, will handle only anthracite coal.

Q. Is it a very expensive plant to put in—would it be expensive to put in a plant to handle this Nova Scotia coal?—A. I do not know what it would cost to handle soft coal.

By Mr. Douglas (Cape Breton):

Q. The same type of plant would do it?—A. I presume so; I do not know. The ordinary bucket system is being adopted by a number of dealers. The bucket elevates the coal to an overhead storage. I do not believe it would handle bituminous properly; soft coal does not run as freely as hard coal.

By the Chairman:

Q. What do one of those cost?—A. It all depends on the size.

By Mr. Hocken:

Q. Do not the Elias Rogers Co. and the Mills Company both take soft coal out of the vessels on the bay front?—A. I believe so, but I have never seen their plant. They must use a clamshell bucket to take that out.

Q. I think they do.—A. Yes, I would think so.

By Mr. Cowan:

Q. Still, there is an enormous quantity of soft coal used in Ontario. There must be some others who have plants to handle it.—A. Nearly all the bulk of soft coal is handled by the manufacturers, direct from the shippers; there is a very small portion of it which passes through the hands of the retailers. What the retailer does handle, in a majority of cases, he takes directly from the cars on the team tracks and hauls it away with teams.

By Mr. Douglas (Cape Breton):

Q. How would the freight rates compare with freight rates before the war?—A. The freight on hard coal from the mines to the frontier in 1914, was one dollar and seventy-five cents per gross ton.

By Mr. Ross:

Q. When, Mr. Caspell?—A. In 1914.

[Mr. B. A. Caspell.]

Q. You are still speaking of hard coal?—A. Of hard coal. The freight rate on hard coal from the mines to the frontier in 1917 was \$1.75; to-day it is three dollars and sixty-four cents per gross ton.

Q. More than twice as much?—A. Plus—and don't forget this, gentlemen—the New York Exchange. That is another fifty cents.

By Mr. Douglas (Cape Breton):

Q. You are speaking now about all rail coal?—A. All rail coal.

By Mr. Hocken:

Q. And from the frontier—A. That is to the frontier.

Q. But from the frontier?—A. From the frontier, the rate varies, but speaking of Brantford, our rate in 1914 was seventy cents.

Q. What is it now?—A. One dollar and a quarter.

Q. So the increase is not as great in Canada as it is in the United States?—A. No.

Q. Coal gets preferential treatment here?

By Mr. McKenzie:

Q. Were you here yesterday?—A. No, I was not here, sir.

Q. You heard parts of Mr. Harrington's statement repeated here about the possible supply of anthracite and the number of years in which it is likely to disappear? Have you any personal knowledge of the situation?—A. No, sir. I do not know what Mr. Harrington knows about it, but I was reading over a statement made here by Mr. McAllister, before your Board, in which he says that the United States Fuel Administration have estimated that the sources are capable of producing over ninety million tons per year for some centuries to come. That is rather contradictory to Mr. Harrington's evidence.

Mr. DOUGLAS (Cape Breton): And I think very much better evidence.

By Mr. Hocken:

Q. Does that refer to anthracite?—A. Yes, sir, to anthracite.

By Mr. Cowan:

Q. Do you know what the consumption of anthracite is in the United States?—A. I think it is around ninety million tons per year.

Q. That means that the present consumption in the United States is equal to their entire output?—A. I presume—

Q. And with the increase in population they will soon be short, which means that we will be entirely at the mercy of the United States and depending upon their charity?—A. I would presume the ninety million tons would include the four and a half million which we use.

The CHAIRMAN: Is there anything further to ask Mr. Caspell?

By Mr. McKenzie:

Q. We are here, Mr. Caspell, very largely for the purpose of finding out how we can secure a supply of fuel for the country generally, with a special eye to the province of Ontario. Do you think there is any necessity for anxiety along that line? Have we got a sufficient fuel supply so there is no need to worry about the future fuel supply of Ontario?—A. I think you are quite right in going ahead with your investigation, and endeavouring to locate a supply of coal, because we do not know at what day or hour we may be cut off.

[Mr. B. A. Caspell.]

By Mr. Cowan:

Q. That is what we want to find out—where we are at. As a nation it is up to us to look after our own supplies.

The WITNESS: Yes, I think you have made an important step when you started this Committee.

By Mr. Douglas (Cape Breton):

Q. Do you know anything about the coke situation?—A. No, I do not.

Q. You do not handle coke at all?—A. No.

Q. Generally speaking, the members of your association do not deal very much in coke?—A. No; the gas-house coke is supposed to be the best domestic fuel. Of course, with the high price of coal and the consequent high cost of manufacturing gas, it is not being produced very largely, so there is not very much on the market at the present time for domestic use.

By Mr. Douglas (Cape Breton):

Q. Does it sell at a higher price than anthracite?—A. No, it will be a little bit less than anthracite.

By Mr. Hocken:

Q. Do you know anything about peat, Mr. Caspell?—A. No, I do not know a thing.

By the Chairman:

Q. Some natural gas is used in Brantford?—A. Yes.

Q. Much?—A. Quite a little. When natural gas first came into Brantford, which would be about ten years ago—ten or twelve years ago—I presume they cut off our tonnage about one-third. We are gradually getting it back, because the natural gas has not been satisfactory. It has been that strong sulphur gas from the Selkirk field, and in addition to that they increased the price to a little better than double the former amount, so there is not much being used.

By Mr. Hocken:

Q. Was there much of that used for domestic purposes?—A. Oh, no; for cooking purposes. We find at this season of the year a good many householders use it under the hot water boilers because they don't get the odor in that case.

By Mr. McKenzie:

Q. They have in the province of Alberta, as testified before this Committee, an agent or a commissioner in the city of Winnipeg with certain appliances to demonstrate the use of their soft coal to show how it can be used. Do you think some such system would be useful say in the city of Toronto to show the people how Nova Scotia soft coal for instance could be used either alone or as an admixture with anthracite in their furnace?—A. I think you would have to adopt some policy along that line to educate our people to the use of some other coal than anthracite.

Q. You think that would be a way of doing it?—A. You spoke about your furnace; it is not the stamp of furnace we have in the east here. Would not your flues plug up with ordinary soft coal?

Mr. COWAN: Once in a while we have a brush. Once a year we run it through and that is all there is to it. The soft coal we use we simply throw it in like so much dust. We shake down our furnace first, arrange our drafts and then it goes all over the top just like an oil or coke and about noon we go down and shake it up and throw on a little bit more. That is all there is to it. You can maintain a perfect heat throughout the house; no trouble at all.

WITNESS: I know the year before last some quantity of soft coal was tried and we had an awful lot of trouble. It seemed to plug up and they did not get the heat at all.

[Mr. B. A. Caspell.]

Q. We must have a superior quality of soft coal than you have been getting. We have no trouble about that.—A. It must be that.

The CHAIRMAN: You must consider in the West you don't feel the cold.

Mr. COWAN: The contention I make is this, in the mind of the ordinary layman, if I can go down and look after the furnace with our coal, surely the people of Ontario can do the same, and I should say you would cut your cost about one-half. That is my opinion. I am not speaking from actual knowledge, but I know we could not afford to use anthracite in our furnaces. We would not dream of doing it.—A. The thing that struck me—

By Mr. Cowan:

Q. Anthracite in our place costs about \$22, and if you figure to cut out the rock and the slate it must be about \$40 a ton. It is the American anthracite we are getting.—A. The thing that struck me, Mr. Chairman, in connection with your campaign to try to secure—of course you are looking more to the future than you are to the present needs, but it seems foolish to think of sending coal to Toronto from Winnipeg, or say farther west. I presume they will require 100,000 tons of anthracite in Winnipeg, and it would seem foolish to bring soft coal from the West to the East, and to ship anthracite coal from the East to the West, a similar amount, unless you did something to stop the anthracite coal going to the West.

Q. That is precisely what we are doing. Out there we are trying to lessen the consumption of anthracite and I think it is being substantially lessened and the policy which the Alberta Government has inaugurated, and which has already been quite successful will to a large extent supplant that anthracite.—A. We have the same condition down here. Montreal and Quebec use a million tons of anthracite. I believe, somewhere in that neighbourhood. Should not something be done to get that market weaned over to soft coal before you endeavour to touch Central Ontario?

By the Chairman:

Q. Can you offer any recommendation to the Committee from the retailers' point of view in Ontario?—A. I don't know that I have anything to suggest here.

By Mr. Hocken:

Q. What would you say to this: Supposing Montreal and Quebec can be served by Nova Scotia and as far as the head of the lakes from Alberta, would there be plenty of coal for Ontario then from the American field?—A. Yes, I believe you would not have any shortage at all.

Q. At lower rates than we could get it from other points?—A. Have you investigated the rate on soft coal from Alberta?

Mr. HOCKEN: Yes. It is enormous.

By Mr. Douglas (Cape Breton):

Q. What would you think of the idea of the Ontario Government co-operating with the Nova Scotia Government with the view to introducing soft coal into Ontario, and also coke, having a demonstration plant at some central point, and gradually educating and introducing the people to both the advantages of soft coal as well as coke?—A. It sounds reasonable, sir. Educational campaign is the only thing that will ever wean them over from anthracite coal.

Q. The Ontario Government has never done anything in that direction?—A. Nothing whatever. I won't say nothing whatever—well, they have not along the lines you are speaking of. The Ontario Fuel Administration had an expert who was going around among the different manufacturers during the shortage of soft coal the winter before last, urging upon them the advisability of using say anthracite screenings or hard coal screenings in place of soft coal, which they could not secure at that time.

[Mr. B. A. Caspell.]

That is as far as I know of any effort being made by the provincial government to do anything.

Q. That was just merely an emergency to try to relieve the situation?—A. Yes.

The CHAIRMAN: I might say we have a witness from the city of Ottawa present who is prepared to give evidence to-day if the Committee desires to hear him.

Mr. COWAN: Surely.

By Mr. Hocken:

Q. We have a company in Toronto that bags the coal dust and turns it into briquettes. What would you say about that as an economical proposition?—A. That is all right. That is the Nukol.

Q. Yes. They are selling it at less than the anthracite coal?—A. I think when anthracite was \$17 Brantford Nukol was selling at \$17.

Q. Does it give as good service?—A. No, it fills the flues. In a good many cases it would fill the flues.

Q. It is anthracite dust?—A. Anthracite dust, I presume that is what they use. It is not in a class with the boulets that Mr. Daly spoke of. If they could manufacture as good a briquette as the boulets are they would be doing something worth while.

Mr. DALY (previous witness): If they would use the same ingredients. There is a vast difference in the coal.

WITNESS: Perhaps you could establish a boulet factory and relieve the retailers of a considerable quantity of their anthracite screenings at perhaps a little better price than they are able to secure. I sold some screenings the other day at \$1.75 a ton, which cost me \$13.50 a ton.

Q. What screenings would you have out of, say 100 tons of coal?—A. It would run perhaps between three per cent and four per cent and five per cent.

By Mr. Douglas (Cape Breton):

Q. That is one of the big items I suppose of the cost of doing business?—A. One of the big items.

The CHAIRMAN: Anything further to ask the witness? I thank you. Shall we hear Mr. Halpin of John Heney & Son Company?

Mr. COWAN: Yes.

Mr. WILLIAM J. HALPIN, called, sworn and examined.

By the Chairman:

Q. You are an officer of John Heney & Son Company?—A. Vice-President and Managing Director.

Q. How long have you held that position?—A. Managing Director for the past year, and I have been Secretary since 1911; in the coal business since 1907.

Q. Have you any statement to present to the Committee?—A. I have not prepared any formal statement, Mr. Chairman, but with your permission I would like to make a few preliminary remarks. Regardless of the ultimate solution of the problem, or as to whether or not it is economically possible to market coal from Nova Scotia in Ontario, the fact remains that for next winter any way Ontario will be dependent on the United States for anthracite coal. Now the situation is very serious, and I would like to impress upon the Committee the seriousness of it. I think the Committee could do a great deal of good if they issued a warning to the public to buy their coal now. I think that a warning coming from this Committee would have more weight than a warning coming from any other person or body of persons. A year ago coal was selling in Ottawa at \$13.50 a ton. There were several advances due to advances in the mine, freight rates, etc., that brought the price up to \$17.50 in March. On the first of April the majority of the line companies, five out

[Mr. B. A. Caspell.]

of six of them, reduced their price 50 cents a ton and announced in the beginning of May, beginning May 1, there would be an advance of ten cents a ton for the five succeeding months. In our opinion the larger part of the coal-buying public has been anticipating a drop in the price of coal along with the prices in the various other commodities. If a dealer has his bins filled and the public are holding back waiting for further reductions, he will have to ask the companies to stop shipments and the mines will close down. For your information I might state that the anthracite miners really have to work practically at capacity for the full fifty-two weeks in the year to take care of the anthracite demand. Last year the situation was very serious. In fact it was due chiefly to the fact that last fall for three weeks there was what was known as a vacation strike and had it not been for the extremely mild fall and winter we would have had a situation similar to what we had a few years ago. The public would say if we issued a warning it was merely propaganda, that we wanted to have our business spread equally over the full period. As I stated, they are looking for further reduction. Now from last year the causes that have put the price up have been these: first, there is an increase in the miners' wages and their wage agreements have another year to run. Now, I think it is out of the question to expect any reduction in the miners' wages until another year anyway. The second point has been the increase of the freight rates. Some of the public expect a reduction in freight rates. While we anticipate that the American railroads will no doubt reduce the railroaders' wages—for the last year 70 per cent of the American roads did not earn interest on their bonds, so whilst they might reduce the wages we don't think there will be any reduction in freight rates. Another point is, up to May first last year we paid for our coal in American funds at the mine, but since the first of May last year we have had to pay for it at the border; that is, in addition to sending American funds for the cost of the coal at the mine we have had to send American funds for the American portion of the freight rate and about two-thirds of the haul is through American territory; so you can see a reduction in the price is practically out of the question. The line companies have already announced their policy and the price will be advanced 10 cents a ton each month. Some might say it is just a question of making provision for the shortage next winter. If the mines are closed down next fall and winter they can only utilize a certain number of men in each mining shaft. In the second place they cannot take on extra railroaders and steel men in the mines because the state of Pennsylvania will only allow a fellow to mine coal when he is working two years in the mines. So for the last five or six years the output of anthracite has remained about the same, and the demand has been increasing practically each year, so the mines have to work at full capacity for the full period to take care of the supplies. If the public do not take in their coal it will mean the mines will have to close down and in fact some of them have already closed down and we figure the situation next year will be very serious. Another point, when they are moving grain there is always a shortage of cars. We think that will be more acute this year for the reason that for the past month or two the American people have only been handling about 50 per cent of their business and no doubt they will all be in the market buying at the same time, and no doubt there will be an extra demand on the railroads. This is a pamphlet issued by the Irving National Bank. It is their Mid-monthly review of business, issued April 18, just received the day before yesterday. They say "anthracite coal is perhaps the most noteworthy instance of a staple whose price is sharply at variance with the general tendencies. On April 1, 1921, anthracite in stove sizes cost \$9.96 wholesale in New York, compared with \$8.45 April 1, 1920, and \$4.85 in April 1914. Bituminous coal (Pittsburgh) f.o.b. Chicago on the same dates sold for \$7.20, \$5.45 and \$3.55 respectively. Paper and alcohol, though receding in wholesale quotations, are not yet in line with cut price readjustments. Equally striking disparities occur in wages now paid in various occupations."

[Mr. B. A. Caspell.]

By Mr. Douglas:

Q. Will you give that bituminous again?—A. Bituminous f.o.b. Chicago, \$7.20, \$5.45 and \$3.55.

Q. I don't mean that. What you were quoting?—A. This is anthracite coal. "Curtailed production in basic industries: Decreased production prevails in many basic industries. Features of March were the shutting down of a number of large copper mines, a pig iron output of only 1,595,000 tons, or less than half that of October, 1920, a steel ingot output of 1,570,978 tons against 3,015,982 last October, a declining weekly production of bituminous coal until it is now below one half of maximum capacity, half time or less in lumber production, and a restriction in acreage of some new crops. This policy of curtailment has not yet fully made its effect felt generally upon prices. In iron and steel the weekly average of fourteen representative products compiled by the Iron Trade Review showed an uninterrupted decline since the beginning of the year from \$52.75 then to \$43.86 on April 5, but rising to \$43.90 on April 13, 1921. During April, 1914, the average was \$23.39. It is asserted that actual consumption in the steel trades to-day is in excess of present output."

"The small output of bituminous coal already mentioned accounts for more than half of the idle freight cars in the United States, estimated at 507,427 on April 8; this total comprises over 20 per cent of the entire number in the country. Steady declines in freight car loadings brought the total for the week ending April 2 down to 666,642 cars, a decrease of 192,185 compared with the corresponding week of 1920. With the exception of grain and grain products, decreases were reported in the loading of all classes of freight compared with the previous week. Next to coal, the greatest loss was reported in the loading of merchandise and miscellaneous freight, which fell off to the extent of 4,000 cars. This is the first decrease in the loading of this class of freight since January 1, 1921.

"Railroad conditions show a few signs of improvement. During February a total deficit of \$7,205,000 occurred, compared with \$1,167,800 in January. Of the 200 reporting railroads, 106 failed to earn their expenses and taxes, according to an analysis made by the Association of Railroad Executives. Tabulations show that in every district the roads fell far short of receiving the amount which it had been estimated they would earn under the increased rates."

You will see from these few paragraphs that reduction in the price of coal is practically out of question, as I point there can be no reduction in the miners' wages as their wage agreements have another year to run, and I don't think we can look for any reduction in freight rates, even though we have a reduction in railroaders' wages, and exchange is a thing we cannot depend on, but I do not look for any reduction from that point. The line companies have already announced that beginning May 1st there will be an advance of ten cents a ton each month so that coal will be higher in price later on, and as I pointed out the anthracite mines of the United States practically have to work at capacity the full fifty-two weeks in the year to take care of the demand. If the dealers have their bins filled up and the public are not taking it in they will have to stop shipments, the mines will close down; some have already closed down, and they won't be able to make them up next fall and winter. In the first place they cannot utilize extra men if they have them; in the second place they will not be allowed to have anyone mining coal except he has two years experience in the mine. Then on top of that, even if they could get out the coal they could not get the cars.

By Mr. Douglas (Cape Breton):

Q. In other words steady employment keeps costs down?—A. Yes.

Q. Are the people buying as readily this year?—A. We sent out a circular on the first of March putting it up to our customers and the response we have had has been

[Mr. B. A. Caspell.]

very gratifying. We have been working our equipment to full capacity. We don't know how long that will continue. Last year they were panicky. They knew there were going to be advances in the mine price and the freight rate. I might say last year on the first of May we had 60 per cent or 70 per cent of our entire year's business on the books waiting for delivery. We had to take every order in turn. We are working now to capacity. We are taking all the coal we can get, but if later on, in July and August we are then cut off and have to stop shipments the chances are we won't get them later on.

By Mr. Hocken:

Q. What storage capacity have you got?—A. 15,000 or 16,000 tons.

By Mr. Hocken:

Q. How much have you got in there anyway?—A. We have got probably ten or twelve thousand. We have taken more than our allotment this month. That is, we buy all our coal from the line companies under a yearly contract, and we are supposed to take one-twelfth each month. We have taken our entire amount for April.

By Mr. Cowan:

Q. The people of Ontario last year, by laying in their coal early,—that was financially a profitable undertaking for them?—A. The persons who took it last April got it for \$13.50. On May 1, it had gone up to fifteen dollars and a quarter and fifteen dollars and a half; later on it was fifteen dollars and seventy-five cents, but in March it was as high as seventeen dollars and a half.

Q. Was it the Government's campaign which induced them to lay in their coal? Did the fact that the governmental department warned the people, have any beneficial effect?—A. The public know that prices were going to advance. In fact, we had been urging our customers to place their orders for some time. It was shown that it was going to be necessary to have increased freight rates, and we knew the railroads had just been turned back by the United States Government, and it was necessary for the companies to have increased revenues, and we were anticipating a substantial increase in freight rates, all of which would increase the price of coal. In fact, since 1914, each year they have been buying earlier; last year they bought earlier than ever, and since 1914 our equipment has been kept busy all the summer.

Q. You have asked this Committee to issue a warning. Is that such a warning as the Ontario Government formerly issued?—A. There is no one now in an official capacity in the Ontario Government to issue that warning, and, as I say, I do not think the public would pay as much attention to any other warning as they would to a warning issued by this Committee, who have been investigating the situation for some time. I think a warning from this Committee will have a very great effect.

Q. Do you agree with the witnesses who preceded you that the Ontario Government should have continued with the office of the Fuel Administrator, as being in the best interests of the people?—A. I do not know whether there is any use for continuing him in office. Outside of advising the people and warning them now, there is no question of getting coal. We can get the coal now. It is a question of getting it later on.

By the Chairman:

Q. You distribute coal to certain points outside of Ottawa, too?—A. Yes.

Q. Over what area?—A. Well, to all points that would be served by entry through Ogdensburg and Rouse's Point, and around the Quebec area lying—that is, the district that is closer to Ottawa than to Montreal, would be served by Ottawa, and up around Temiskaming and all around that district.

By Mr. Cowan:

Q. Do the people use anthracite for domestic purposes?—A. Practically all anthracite.

[Mr. B. A. Caspell.]

Q. Have you ever made any attempt to introduce soft coal for domestic use?—A. No, we have not.

Q. Has anybody else in this locality made any attempt to do it?—A. The Fuel Controller for the Dominion was urging it a few years ago, but outside of that I do not know of any.

Q. What success did he have?—A. As long as the anthracite was available they would not take bituminous.

Q. Evidently, you are aristocrats here the same as they are in Toronto.

By the Chairman:

Q. You say you buy all of your supply from the line companies?—A. Yes.

Q. You have had no experience with the independent companies?—A. No. Perhaps ten years ago we bought an odd car from the independent companies, but I have no recollection of buying from them.

Q. The price of coal is based—A. It is all based on line companies.

Q. Dealers who are buying from independent companies would either have to charge a higher price, or sell at a loss?—A. Ottawa has been particularly fortunate, in this way: There is one company which supplies the greater part of this market, that is, most of the other dealers would also buy from line companies, or a couple of them, and the company which supplies the greater part of this market have preferred to ship to this point, because they have not only the profit on the coal, but they have the long haul over their own line, that is, coal coming into Ottawa, would come over the D. & H. to Rouse's point, and from there in over the Grand Trunk, or C.P.R. So, as I said, they have not only the profit on the coal, but the long haul over their own line. That is one reason why Ottawa was so fortunate. Last year, early in the year, before the fall walk-out of the miners, a large percentage of the coal had been supplied to this district. Now, I think it was in January, or the beginning of February, they were taking a considerable quantity out of the schools in Buffalo and distributing it among the residences, but Ottawa was not in any such position as that. We had a large percentage of it during the summer months, and then the mild fall and winter on top of that—whilst our supply was down very low, we managed to get through. The same thing applied during the freight crisis of 1917 and 1918. We were never out of coal at that time. We took care of the Government buildings at that time, and the city buildings, and took care of ninety per cent of the people of Ottawa, because we kept our bins filled up and took in all we could get.

Q. Do these buildings use anthracite?—A. They were at that time. The central heating plants used bituminous coal, but outside of that they were using probably eight thousand tons of anthracite, and about nine or ten thousand tons of bituminous.

Q. What buildings are those?—A. The Government buildings at Ottawa.

Q. In what furnaces of Government buildings do they use bituminous coal?—A. In the central heating plant and in the Hunter Building, and in a few of the smaller buildings. In the others they use anthracite.

Q. Where do they get this bituminous coal?—A. Tenders were called for a few days ago; the contracts have not been awarded as yet.

Q. Is it all bituminous?—A. Prior to the last few years, they used anthracite entirely, but now they are using bituminous.

Q. How has this succeeded? Are they continuing to use that in a heating plant?—A. Bituminous?

Q. Yes.—A. They called for tenders for bituminous.

Q. Evidently it has been satisfactory?—A. Yes.

By Mr. Ross:

Q. Has it been American or Canadian bituminous?—A. American.

[Mr. B. A. Caspell.]

By Mr. Cowan:

Q. American bituminous?—A. So I understand.

Mr. COWAN: I think we should start in with our own Government.

By the Chairman:

Q. That is bought under tender?—A. Yes.

Q. And the lowest tender gets the order?—A. Yes.

Q. Regardless of where it comes from?—A. Yes.

By Mr. Cowan:

Q. Is this coal which is consumed in the central heating plant, bituminous coal—bought on test?—A. They call for tenders, and ask in the tenders to specify the mines where that supply of coal is coming from.

Q. That is all?—A. Yes.

Q. It does not matter whether it comes up to a standard or not, they still pay the same price for it?—A. No doubt before awarding the tenders they compare analyses of the various coals—

Q. I do not believe you grasp what I mean. In our large power plants in the west, there is a weekly test made. A contract is awarded. The coal must come up to a certain standard by a test in each week or month—I forget which it is—but if it falls below that, when the company tendering has to reimburse according to the amount it falls below; if it is above that standard the company will get an additional price. Is there any such thing done here?—A. I do not know, we have not supplied the bituminous coal. We have supplied the Government buildings here for a period of over twenty-one years, up to the last couple of years, but we have not been able to supply them with bituminous as yet.

Q. You do not know whether any of the coal supplied here is sold on test?—A. I do not know.

Q. To the Government or otherwise?—A. Do I get you right—?

Q. That is, coming up to a certain standard? Is the standard fixed?—A. When the tenderer says he will supply coal from a certain mine, the Government has statistics which give the analysis of the coal from that mine.

Q. Take the city of Regina: they award a contract to a certain company. Last year by a certain test, that company had to reimburse the city of Regina nearly seven thousand dollars because even though the coal came from the specified mine, it did not come up to the fixed standard. Now, is there anything of that kind done here?—A. I am pretty sure it—

By the Chairman:

Q. As a matter of fact, Mr. Halpin, you do not know?—A. I am pretty sure there is not.

Q. You do not know what the Government departments are doing?—A. No.

Mr. DOUGLAS (Cape Breton): He says he is pretty sure.

By Mr. Ross:

Q. They do not do that with you?—A. We tell them that we will supply them with Lackawanna coal from the Hudson Coal Co., and we supply it. They have an inspector down there at the yards to see that every ton is properly screened, and up to the proper specifications.

Q. And they know that coal comes from the Lackawanna coal mines, and they know what the ordinary tests are, but you do not know whether they are considered or not?—A. I know one year they wanted to put in a clause as to the test, but our shippers would not allow it to be put in. They said: "All we will undertake to do is to supply you with the same coal you have been getting," and then we told the Government that we would supply them with Lackawanna coal, the product of the

[Mr. B. A. Caspell.]

Hudson Coal Company, and have it properly screened. There is an analysis of that coal, but they would not allow any clause to be put in showing it was up to a certain test.

Q. Are you still supplying Lackawanna coal?—A. Yes.

Q. Do you still get it?—A. The coal we have been supplying has been all Lackawanna.

Q. I think we are talking at cross-purposes. You said nine thousand tons of anthracite and eight thousand tons of bituminous coal were used. Where did the bituminous coal come from?—A. I do not know.

The CHAIRMAN: Would it not be better to ask this witness what he is supplying the Government, rather than what the Government is doing? He cannot have accurate knowledge of what the Government is doing.

Mr. DOUGLAS (Cape Breton): It may not be accurate, but it is very useful.

WITNESS: In that blue book on the window-sill it shows the quantity the Government bought and paid for last year, and who supplied it.

Mr. COWAN: We will have to get a form of contract or tender, because I want to know if there is any discrimination being shown against the Canadian mines by the Government, or if there is any preference.

The CHAIRMAN: This witness cannot possibly know that, except insofar as the coal which he supplied is concerned.

Mr. ROSS: He might.

Mr. CHISHOLM: I think this witness will know where the coal comes from—the coal which was supplied.

WITNESS: Anthracite or bituminous?

Mr. CHISHOLM: Bituminous.

WITNESS: A tender was given to a gentleman from Montreal, and I understand that he supplied the bituminous coal from the United States.

By Mr. Ross:

Q. When you supplied bituminous coal, did you supply it from the United States?—A. No, we never supplied them with bituminous coal. We have supplied them with anthracite.

By Mr. Chisholm:

Q. That standard of which Dr. Cowan spoke might be a physical rather than a chemical standard.—A. In this year's specifications they have stated that the bituminous coal must show at least thirteen thousand B.T.U's and must not contain more than eight per cent ash.

By Mr. Cowan:

Q. But they make no test during the year as to whether it comes up to that standard or not? That is the point I want to get at. I want to know that, if I possibly can—

The CHAIRMAN: How can this witness tell you whether the Government makes these tests or not. Let us call a witness who has some information on the matter.

WITNESS: Some years ago the Mines Department, when we were supplying the full quantity of anthracite coal, called for samples from our bins and analyzed them.

Mr. DOUGLAS (Cape Breton): The witness has made this important statement, that at the present time they are asking for tenders for eight or ten thousand tons of bituminous coal, and there is no indication that there is any preference given to

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Canadian coal as against American coal. What I think should be done, Mr. Chairman, is that arrangements should be made with the Government to give every reasonable preference to Canadian bituminous coal and this should be done promptly in view of the fact that these tenders are now outstanding. Is that correct, Mr. Halpin?

MR. COWAN: The point is, Mr. Chairman, if you will pardon me, there is a great difference in the quality of bituminous coal.

THE CHAIRMAN: Agreed, Doctor.

MR. COWAN: If the American coal is superior to the Canadian coal it might make a difference, but if they are simply buying bituminous coal, they may be discriminating against Canadian coal, and if they are I think the test will show it.

THE CHAIRMAN: The only point I wish to emphasize is that we are inquiring of this witness if tests are made of this coal, which the Government has bought. He cannot possibly know what the Government is doing, except in so far as he may know what they do with the coal he supplies.

MR. COWAN: The tenders which they submit show it.

THE CHAIRMAN: Yes, that is right. It must be on the tender.

MR. COWAN: If he was a tenderer, he would know it.

THE CHAIRMAN: Yes, but you are questioning him as to whether or not the Government made any tests. How does he know that?

MR. CHISHOLM: He knows a great deal about these matters.

MR. ROSS: All we need to do is to ask him. If he says he does not know it, that ends it.

MR. DOUGLAS: He is a well-informed witness. He has been in business a great many years, and to my mind, has given very satisfactory evidence.

By the Chairman:

Q. What is your knowledge as to what the Government does in the way of testing the coal which they buy?—A. As I have said, some years ago the Mines Department would take a sample of our coal—call down and take it down from our bins and analyze it. That is all I know on the subject.

MR. COWAN: That is the best thing we have got to-day, because we want to get Nova Scotia coal in here. That is my idea. It is all right for Ontario to get her coal, and my idea is get Nova Scotia coal into any part of Ontario we can. That is the only reason I am on this Committee. I am a sufficiently good Canadian to stand up for it. The Canadian coal, as far as I have seen, will stand up against any tests, and against any foreign coal.

By Mr. Hocken:

Q. Do you think you can bring Nova Scotia coal into Ottawa, in competition with American coal?—A. I have not got enough information on that to say. Some years ago, when we were asking for prices on Nova Scotia coal, and inquiring as to the freight rates, we found it cost about a dollar a ton or so more for the Nova Scotia coal than it would cost to bring in bituminous coal from the United States. I do not know how it is to-day.

By Mr. Douglas (Cape Breton):

Q. Who does the largest coke business in the city?—A. Ottawa Gas Company.

Q. They make a great deal of coke?—A. What?

Q. They manufacture it, do they not?—A. It is their by-product after manufacturing their gas.

By Mr. Cowan:

Q. What do they do with their coke?—A. Sell it in Ottawa.

[Mr. B. A. Caspell.]

Q. Any trouble in selling it?—A. I do not know. I suppose they manage to get rid of what they have.

Q. Do they sell it for domestic purposes, and are the people satisfied who use it? Do you know?—A. I cannot say.

By Mr. Douglas:

Q. Does it sell at a lower price than anthracite?—A. Yes, they regulate the price according to the price of anthracite. I mean to say that sometimes they may have a shortage in the supply of coke, and their price increases accordingly, and if they have a surplus, they make their price sufficiently below that of anthracite to dispose of it.

Q. But it is generally lower?—A. Yes.

Q. To the extent of a dollar a ton?—A. I think three or four dollars.

By Mr. Cowan:

Q. Have you ever heard any complaint from the people who use it?—A. My general opinion has been that it is hard on the grates—the furnace grates.

Q. Yes, I have heard that. But beyond that, there is no objection which you have heard?—A. Of course, it would not give satisfaction during mid-winter; it is used, I think, in the fall and spring, but I do not think it would hold the fire, or give as much heat as the anthracite coal.

Q. It is a good substitute though?—A. I have never used it, and I do not know much about it,—

By Mr. Hocken:

Q. It burns out much more quickly?—A. Excepting this, that we supply some of the employees of the Ottawa Gas Company, some of the chief officials.

By Mr. Douglas (Cape Breton):

Q. Do they supply any of your employees with coke?—A. Not that I know of.

Mr. COWAN: Turn about is fair play.

Mr. HOCKEN: That is reciprocity.

Mr. COWAN: I am mighty glad we had that.

The CHAIRMAN: If there is nothing more, we will excuse Mr. Halpin.

Witness excused.

The CHAIRMAN: Before the Committee adjourns, there is a desire I think for additional copies of the printed evidence. There does not seem to have been enough ordered to supply those who wished them. Does the Committee approve of ordering n additional hundred copies?

Mr. COWAN: I want to say that every coal dealer in the province is writing to me for a copy of the evidence.

The CHAIRMAN: Does the Committee agree we should order an additional hundred copies?

Mr. DOUGLAS (Cape Breton): As many as the Chairman requires.

The CHAIRMAN: What number will be required? I suggested an hundred, but you require more than that, let us order them now.

Carried.

The CHAIRMAN: Shall we meet to-morrow?

Mr. MCKENZIE: Have you any witnesses for to-morrow.

The CHAIRMAN: I am not sure. I have not heard from the witness from Montreal. We still have one or two local retailers to be heard.

[Mr. B. A. Caspell.]

Mr. DOUGLAS: I think, Mr. Chairman, we should have some evidence on this question of coke. Instead of having so many of the retail coal dealers—because I think this witness has covered that ground pretty well—perhaps we should have a witness from the Ottawa Gas Company on the question of making coke.

The CHAIRMAN: Had we better introduce that now? Our programme calls for taking up the different substitutes for coal at a little later period. Coke, peat, and the other substitutes. I think we had better adhere to a systematic procedure, and a little later on spend a day or a half a day on coke, instead of having that evidence sandwiched in with the coal problem.

Mr. DOUGLAS: Mr. Dion, I understand, is the president of the Ottawa Gas Company. May we not call him when convenient to the Committee?

The CHAIRMAN: I may hear this afternoon as to whether or not the gentleman is coming from Montreal, and if he is not coming, we have no witnesses for to-morrow, excepting some of the local retailers.

Mr. COWAN: You have not forgotten Mr. Ross, chairman of the Lignite Utilization Board?

The CHAIRMAN: No, on Monday we hope Mr. Rogers of Toronto will be heard. He was unable to come to-day, and I have not heard definitely as yet. On Tuesday we have Mr. Drummond. I would suggest, if we do not get the witness from Montreal, that we dispense with having a meeting to-morrow.

Mr. DOUGLAS: How would it do to clean up this local business? We can finish that to-morrow and get it over with.

The Committee adjourned until Friday, April 29, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

FRIDAY, April 29, 1921,

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at 10.45 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will the committee please come to order? Following the line of evidence yesterday which we had from the Retail Coal Merchants, we have with us this morning a representative from the C. C. Ray Co., of Ottawa, and I will ask the committee now to hear him.

JAMES M. HURCOMBE, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. I am Secretary Treasurer and Managing Director of the C. C. Ray Co. Ltd.

Q. Of where?—A. Of Ottawa.

Q. How long have you held that position?—A. I have been with the firm for over twenty-five years.

Q. And they are engaged in the retail coal trade of Ottawa?—A. Yes.

Q. Do they do any wholesale business?—A. Very little; practically all retail.

The CHAIRMAN: Gentlemen, the witness is now before you.

By the Chairman:

Q. Have you prepared any statement?—A. I have not, no sir. I have heard a good deal of the evidence given here during the last three or four days and I agree to a great extent with the evidence given by Mr. Halpin yesterday as far as the conditions prevailing in Ottawa are concerned. Our business is mostly anthracite coal, and in the past we have bought practically altogether line companies' coal, and I think I may safely say that the prices in Ottawa have been lower during the past few years than in any large centre of the Dominion for anthracite coal.

By Mr. Cowan:

Q. How was it that you were able to sell it lower in Ottawa than elsewhere?—A. Probably due to some extent to the fact that we have been able to get practically all line coal. That is, we have not had to buy very much, if any, from the Independents of which Mr. Daly spoke yesterday, they have to sell for twenty-two dollars a ton.

By the Chairman:

Q. Has there been much of the independent coal companies' products coming to Ottawa?—A. Not very much, no. That is what I said; Practically ninety per cent of the coal coming into Ottawa is line coal.

Q. How do you explain the fact that you have been able to get practically a full supply for the city from the line companies?—A. Well, principally owing to the fact that the Delaware and Hudson ship coal to this market, and owing to the long haulage which they have over their own road, they rather favour the Ottawa and Montreal markets.

[Mr. J. M. Hurcombe.]

By Mr. Maharg:

Q. Does your supply come in by rail?—A. All rail, now. Years ago we used to bring in coal by water but our water facilities are very limited now.

By Mr. Cowan:

Q. When you brought it in by water, could you get it cheaper?—A. I am speaking now for the C. C. Ray Co. I think in the past, they were the only importers of water coal. They used to bring the coal to Oswego and down the Rideau canal.

By the Chairman:

Q. You spoke of the Delaware and Hudson line. Do they produce the coal that comes to Ottawa?—A. Yes they are operators.

Q. They produce the coal and transport it over their rail to Ottawa?—A. The selling company for the coal is the Hudson Coal Company as divorced from the Delaware and Hudson Company owing to the laws of the United States.

Q. It is a different corporation?—A. Yes.

Q. But with the same interests?—A. I think so.

By Mr. Cowan:

Q. These water facilities that you say are now lacking; you do not own any of these barges or boats yourselves?—A. Well no, but one of the partners or members of the firm of the C.C. Ray Co., was the late Mr. D. Murphy, who was President and practically the owner of the Ottawa Transportation Company which controlled a line of barges on the Ottawa river. It might interest you, and Mr. Douglas, were he here, if I should say that up to 1914, or 1915, the Ottawa Transportation Company used to bring Nova Scotia slack coal and deliver it right across the river here, practically all water from Nova Scotia, by bringing it to Montreal in larger vessels, and transshipping it to their blue barges and bringing it up the Ottawa river to Hull for the Eddy Company. In those days they could bring this coal and undersell the American steam coal—slack coal; but since 1915, or 1916, when the Eastern Coal Companies stopped shipping to Montreal, why, these firms which I mentioned have been bringing in American coal, all rail coal, altogether. Now, the anthracite which we brought in by water, as I say, was loaded at Oswego, on lake Ontario and came across to Kingston and down the Rideau canal to Ottawa. In those days, they used to get a return cargo of lumber which made it possible for them to make fairly low freight rates on coal coming this way. We used also to bring a little coal from Tidewater, that is from New York loading points.

By Mr. Cowan:

Q. What kind of coal?—A. Anthracite coal; anthracite only. That coal would come up the Hudson river through lake Champlain, into the Ottawa river via Montreal, and up the Ottawa river to Ottawa; it was a long round-about way—

Q. That is mighty interesting. It shows me that all these things we have been talking about can be done without any trouble; it has been done.—A. It has been done, yes. I had no thought of this being of interest to this committee until I heard the line of questioning of yourself and Mr. Douglas with regard to shipping by water. Now, the position to-day as far as Ottawa is concerned—take anthracite coal; in the old days, the Erie canal was of probably the same draught as the Rideau canal—

Q. Yes.—A. Since the American Government has spent so much money in improving it, the canal boats on the Erie canal can carry a very much greater load, and while they can carry a greater load through the Erie canal, they cannot carry that larger load through our canals, so they cannot give us the same freight rate.

Q. Naturally.—A. That is one reason why certain of these freight rates have gone up so very, very much. To-day we can bring rail coal in, have the cars out

[Mr. J. M. Hurcombe].

on our trestles at Ottawa, cheaper than we can bring water coal alongside from the United States in canal boats. As far as steam coal is concerned—soft coal—we find we can import American all rail coal, paying the duty of fifty-three cents on run-of-mine, and fourteen cents on slack, pay the exchange, and undersell our Canadian coal from Nova Scotia, that is, as far as the prices we have had quoted are concerned.

Q. In other words, the condition has been completely reversed in the past two or three years?—A. I would not say the past two or three years; the past four, or five, or six years.

By Mr. Maharg:

Q. Is it the transportation charge, or the cost at the mines which is responsible for that?—A. As far as I know it is the transportation charge. I do not know what price the Nova Scotia companies figure on getting at the mines.

Q. They have told us, I think, that it is six dollars and a half a ton.—A. I do not know what the freight from the mines to Montreal would be. I understand they offer coal in bunkers at Montreal at eight dollars and a half. Now, we recently had a quotation on slack coal from, I think, the agent of the Dominion Coal Company, at a price that was very close to \$10 on cars at Ottawa. We can buy that same coal, as I said, from the United States and pay the duty and adverse exchange, for less than nine dollars a ton.

By Mr. Cowan:

Q. Well, now, do you remember whether or not this Nova Scotia bituminous coal, when it was sold here, gave satisfaction to the people who were using it?—A. I think so, yes, sir.

Q. Was it giving as good satisfaction as the American soft coal?—A. The people who used it can tell you that better than I can, but I know that for many years—for very many years—since the Eddy Company have been in business up to this period of which I spoke, 1915 and 1916, they kept on buying the coal, so I presume it satisfied them.

Q. That is a natural conclusion. Under normal conditions and with proper vessel accommodations, Nova Scotia coal was delivered here in competition with the American coal?—A. Yes, as far west as Ottawa, in this one particular case. I might say with regard to that, that as you know, and as I pointed out, our water facilities are very limited. For instance, we have very little accommodation on the Ottawa river for unloading—no accommodation to speak of on the canal for unloading. It is not everybody who could bring in water coal to advantage. In a majority of cases after unloading the coal on the dock, the expense of conveying it to its places of use would add greatly to the cost, and might make the balance in favour of rail coal, as conditions are to-day.

By the Chairman:

Q. Can you tell the committee just what terminal facilities exist in Ottawa for handling coal?—A. We, in conjunction with other dealers, have a large trestle at the Central Depot on the Grand Trunk. We, in conjunction with some few other dealers, some four or five years ago built a trestle at the Isabella street siding of the Grand Trunk Railway. There is quite a large trestle at the C.P.R. terminal occupied by three or four dealers. There are several other independent trestles—I mean individual trestles located on the C.P.R. and the Grand Trunk.

Q. They are all the property of the local dealers?—A. No, not necessarily. The Grand Trunk own their trestle and rent it to the local dealers. We pay them a rental, which probably costs as a little more than if we owned it, if the value of the land could be fixed.

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Q. What about the Delaware and Hudson Company?—A. No, sir, they have no trestle at all.

Q. Did the Nova Scotia Coal Company have any terminal facilities here?—A. No, sir, none whatever.

By Mr. Cowan:

Q. Would it be an expensive thing to provide these unloading facilities for Nova Scotia coal? What I mean to say is this: Supposing the Dominion Coal Company decided to come into this market, and endeavour to secure this market again, and found it necessary to provide unloading facilities for the use of the local merchants, would it be an expensive thing to so provide them?—A. They would have to provide them somewhere along the Ottawa River front on one side of the river or the other. I do not know who has control of the Ottawa River front, or of what they would have to pay for wharfage or the privilege of completion of the docks or trestles.

Q. That is an ordinary matter of business?—A. Yes.

Q. Referring to this Eddy Company who imported coal before: Of course, they could only bring it in by barges in the summer time?—A. Yes.

Q. Were they able to bring in enough to store it for the winter?—A. Yes, they would spread it over the ground. If you look out of that window across the river you see a pile of coal close to the yellow pile. That is where they stored it.

Q. And as far as you know it kept all right during the winter?—It stood the storage all right?—A. Yes, sir. It was stored right out in the open.

MR. COWAN: It looks to me like good evidence for the Nova Scotia coal, and it looks to me like only a question of business to get it in here.

WITNESS: I might say as against that, that I know of a case this season where an American firm has contracted to deliver American coal as far east as the Saguenay,

By Mr. Cowan:

Q. Where is that?—A. Down below Quebec; east of Quebec.

By Mr. Maharg:

Q. In competition with—A. In competition, I presume, with the Nova Scotia coal.

By Mr. Cowan:

Q. Well, now, that is funny. The position was that not so very long ago the Nova Scotia Coal Company delivered coal here in competition with the American Companies. At that time, to all intents and purposes it was just as expensive to mine coal, as far as the normal working conditions of the mine were concerned—apart from wages?—A. Yes.

Q. Then the only difference would be prior to the wages being higher than the rate of wages they were paying—the mining conditions in the mine have not changed very much—

MR. MAHARG: You mean if the American mines are paying a proportionately lower wage to-day than at the time they were competing?

By Mr. Cowan:

Q. Yes. What I mean is this: We have had evidence here that it is a more costly thing to mine coal in the Nova Scotia mines than in the American mines; notwithstanding that, and at a very recent date, they did compete with the American mines?—A. That is one of the few cases I know of.

Q. The natural conditions may have changed very much in the past four or five years.—A. That is one of the few cases I know of. Of course, in this particular case everything was to their advantage. They had water facilities for bringing the coal right from the mines—

Q. From where to where?—A. From some point in Nova Scotia to Ottawa.

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Q. You say the Americans are sending coal down as far as the Saguenay?—A. Yes.

Q. How are they getting it down there?—A. That is loaded at the lake ports, Charlotte, I presume, and goes down the St. Lawrence river.

Q. And I take it it would be a little more expensive to bring coal up the St. Lawrence river than to take it down, but the canal accommodations must be as good one way as the other?—A. I understand in connection with that these people who are delivering this coal are also transporting it—they are a transportation company, and they have a contract to bring back coke. They have freight both ways, which no doubt would enable them to make a low rate on the coal going east, and get a fair rate coming the other way. It would work out to better advantage to them.

By the Chairman:

Q. Are they operating timber limits?—A. No, sir, they are principally a transportation company.

By Mr. Maharg:

Q. I suppose the boats bringing coal from Nova Scotia would be at a disadvantage in that respect—they would have to return light?—A. I cannot say as to that, sir. I should think that most of them would go back light to Nova Scotia.

By the Chairman:

Q. You said before that you had no difficulty in Ottawa in securing coal?—A. No, sir, I would not say that. We have had to go after it pretty hard at times, but we have managed to keep the people going.

By Mr. Maharg:

Q. What are you selling your anthracite coal for here to-day?—A. Egg coal for sixteen dollars and fifty cents, and stove and chestnut for sixteen dollars and seventy-five cents.

Q. \$16.50 and \$16.75?—A. Yes, sir.

Q. That is a considerable advance over a year ago?—A. Yes, sir.

Q. About three or four dollars per ton?—A. I think in March last year, it was selling at thirteen-fifty. Later on it went up to fourteen dollars and a quarter. I think on the first of May it was about fourteen dollars and a quarter, and later went up to fifteen and a half.

Q. To what do you attribute those increased prices, mining, transportation, or a combination?—A. Both increases in freight rate and an increased cost of mining and the exchange.

Q. Well, the exchange is about the same as it was a year ago?—A. Well, exchange is about the same now as it was a year ago, but previous to last year the exchange was not a question which we figured on at all, hardly.

Q. In what proportion would you apply the increased cost at the mines and transportation?—A. I beg your pardon?

Q. What proportion of that would be increased cost of mining, and what proportion transportation?—A. The freight rate in 1917 to Ottawa—the through rate from the mines to Ottawa was three dollars and thirty-five cents.

Q. That is 1917?—A. Yes.

Q. Would that apply up until 1919—the same rate?—A. No, sir. In 1918, it increased to three dollars and sixty-eight cents; in 1919 it went to four dollars and thirty cents; in 1920, up to August, it was four dollars and thirty cents, and about August 26th, it increased to five dollars and sixty-five cents; That is, during the autumn of 1920 it went up one dollar and thirty-five cents plus the exchange.

Q. And that rate applies to-day?—A. Yes, five dollars and sixty-five cents, is the through rate on anthracite coal.

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Q. You think one dollar and twenty-five cents of that increased price is attributable to increased rates?—A. One dollar and thirty-five cents during the last autumn.

Q. Since a year ago?—A. Yes, plus the exchange.

Q. You had the exchange a year ago?—A. Well, but we have the exchange on this increased freight.

Q. That applies to the other side, of course?—A. Yes, the proportion of that freight which has to be prepaid is four dollars and ten cents.

By Mr. Cowan:

Q. That is, the four dollars and ten cents is on the American side?—A. Yes, to Rouse's Point and the border.

Q. Has the increase of freight rates been as great on the American side as on the Canadian side?—Yes, greater.

Q. It has been greater on the American side than on the Canadian side?—A. Yes, sir. This is due, I think, as Mr. Caspell said yesterday, to some extent to the efforts of the Retail Coal Association in putting the matter directly before the Railway Commission.

Q. In Canada?—A. Yes, in Canada. I was at some of the meetings, and the Commission gave it very serious consideration.

Mr. COWAN: That is the first time I ever heard of the Railway Commission in Canada of late paying any attention to anybody's representatives.

By Mr. Cowan:

Q. Have you ever figured out how the freight rates compare per ton per mile as between the Canadian and the American side?—A. No, sir.

Q. That could be done quite easily?—A. I have no doubt the railway officials could give you those figures.

By Mr. Maharg:

Q. According to these figures, there has been considerable increase in the cost at the mines?—A. The increase in cost at the mines from 1920—April 1st, 1920, to 1921, to-day, is ninety cents; last month it was one dollar and forty cents. That is, it went down fifty cents on the first of April which will be increased, we understand, ten cents per month until it reaches the high circular on the first of September.

By Mr. Cowan:

Q. Coming back, Mr. Hurcomb, to the local situation, and the use of bituminous coal here, especially by the E. B. Eddy Co. Do you know whether or not any of these local big companies have since acquired an interest in an American mine—take the Eddy Co. for instance?—A. I do not know it to be a fact.

Q. You do not know?—A. No.

Q. You spoke rather hesitatingly?—A. I do not think they have. It is not of any interest to me, for the reason that there are four large consumers of soft coal in the city of Ottawa and vicinity; that is, the Eddy Company, the other large pulp manufacturer, the J. R. Booth people—they are the two largest consumers of soft coal, and I would say that those two firms, apart from the Gas Company, consume more soft coal than all the rest of the city and vicinity put together.

Q. The reason I was asking that was that if they happened to have any interest in a foreign mine, it would be folly to try to get them interested in the Canadian mines.—A. I do not think they have, sir, for the reason that last year I know I had a party in Ottawa who tried to interest us in the output of a Pennsylvania mine, and I think he approached some of the large consumers, with the same object in view. I have never heard that he succeeded in interesting them.

Q. Is this a part of the American coal operators' game to get the local or big companies interested in the financial operations of an American mine?—A. I cannot

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say it was a part of the American operators' game, but it was a scheme of some brilliant mind, who thought he could get something for nothing, inasmuch as the proposition was that the firm taking an interest in this mine should contract, to start with, to take so many hundreds of thousands of tons—the supposed production of this mine—and put up one dollar a ton to start with. In other words, it would furnish a capital to work this proposition, which was evidently still underground, and insure him enough capital to start with, and then to take his production, but it was too one-sided, I think, for any level-headed firm to take much stock in.

By the Chairman:

Q. This was a new prospective operator?—A. A new prospective operator during the very strenuous times.

By Mr. Cowan:

Q. You do not know if any of the real coal companies have been engaged in any such undertaking?—A. No, sir, I do not. It looks to me as if it might be a very shrewd trick, if it could be worked. There are some firms in the country, for instance, I believe the Eaton Company in Toronto, who have an interest in American soft coal mines, which insure them a regular supply from these particular mines.

By Mr. Maharg:

Q. That would be a matter of business foresight?—A. Purely a matter of business.

By Mr. Cowan:

Q. It might be a matter of business, and it might be a matter of foresight, but it means they are purchasing from the foreign fields and the Canadian mines would not have a change to get in on it.—A. No, but I think if they could make as good arrangements to get their coal where they wanted it, and as cheap as they could on the American side, they would be glad to do it, but the serious difficulty has been, as I said before, that we can buy American run-of-mine and lump coal, and pay the duty and the adverse exchange, and yet more than compete with the quotations we get from the Nova Scotia companies.

Q. That is only for the last three or four years? Prior to that it was different?—A. No, not in a general way, it was not. That is a point I wanted to make when I specified this one instance of Dominion coal coming to Ottawa. I think that was the only instance; we, at that time, were buying American coal for our local transient trade.

Q. If we are going to go into this business of supplying this section of Ontario with coal from Nova Scotia, as I see it, the only way to go into it, is on a very large scale. That is, put it on proper boats for Montreal, and have barge fleets from there on. There is no use in trying to do it in a half-hearted way. It must be done in a wholesale way.—A. Yes.

Q. From your experience would you say that if a proper and regular fleet was put on from Nova Scotia to Montreal with the necessary equipment and proper barges from there on—by making a regular business of it, do you think that Canada could then supply this district with soft coal in competition with the American operators.—A. It would depend altogether on the price they could get it here for.

Q. Have you found any local sentiment against the use of Nova Scotia coal?—A. No, sir.

Q. One of the witnesses said they used to hold the Montreal market, but that because a number of Americans were able to come in there and supply them during the war, the time of need, that therefore the Montreal merchants did not want and longer to deal with the Canadians, or words to that effect, that they were prepared

[Mr. J. M. Hurcombe].

to continue their connection with the United States. Have you found any such sentiment as that here?—A. Not unless they can buy it cheaper from the United States.

Q. Is it simply a case of price?—A. Yes, it is simply a case of price. I think unfortunately too much is a case of price. That the average consumer of steam coal does not inquire into the heat value he gets out of it. It is more a case of price than anything else.

Q. That is my hobby. Is there any soft coal sold here on test?—A. Not to my knowledge.

Q. You have never gotten down to that at all?—A. We have not, for the reason as I pointed out there are very few firms who use any large quantities. I think the Eddy Company and the Booth Company are the two large consumers that I spoke about, if they don't buy it on test, as far as buying on test is concerned, they buy it after testing the quality of the coal for their purposes and probably are willing to pay a little more for the particular kind of coal that suits their particular needs.

Q. Would the coal merchants of this city have any objections to the test system being applied?—A. Under normal conditions I don't think they would, but the trouble is during the past three or four years the retail merchant has not been in a position to exact that condition from his shipper and naturally he would not want to sell that way on his own responsibility.

Q. Supposing we were to establish a grading system in coal. It is admitted that the anthracite is coming in very dirty?—A. Yes.

Q. What effect would that have upon your shipments? Would you be able to get your coal graded to quality? Do the mines at the present time in the United States pay any particular attention to sorting their coal?—A. They are supposed to do, but I may state that during the past year the preparation has been very poor.

Q. I know it unfortunately?—A. So do I. I was at the mines last August down around Scranton, making a complaint in a general way of the quality of coal we were getting. I was down at one of their collieries, and I was shown a shipment of say twelve cars of coal that had been rejected on account of poor preparation. I was told those cars would go through the breaker again and be picked over and the preparation bettered, but I am afraid that last year particularly a good deal got through without rigid inspection.

Q. Is that the fault of the miner?—A. It is the fault of the miner. What do you mean by the miner, the actual miner?

Q. Yes.—A. It is not the fault of the actual miner. It is the fault of the company selling the coal. The actual miner cannot help but pick out some slate and rock that is in the vein. He has to do that to get out the coal and when that coal comes out of the pit and goes into the breaker the producing company is supposed to take out this stuff that is not coal in the preparation of it.

Q. Then in addition to soaking us a much higher price, the American companies are saving money in not preparing it as well as they formerly did?—A. Quite so.

Q. They are making that much more profit?—A. They are making that much more profit.

Q. In addition to that we are paying the freight on this rock and slate and everything else?—A. Yes.

Q. Which means we are paying about \$30 for real coal now?—A. I don't know about that. I saw a little squib in "Life," one man said to the other "How much coal are you burning this year?" he said "One piece in three."

By Mr. Maharg:

Q. How does this inspection come in? Is there any state regulation or federal regulations, or what?—A. I understand there is a state regulation. I don't know how closely it is carried out, but I think each producing company has its

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Inspection Department and regular inspectors at each breaker, whose duty it is to test every car of coal for impurities and size. I have seen them do it, but when a car is loaded, take a fifty ton car of coal, they go along the top of this and take three samples, one towards the end, one in the centre and one in the other end.

Q. Just on the top of the car?—A. They dig down as far as they can, which is not very far. They put those together, divide them and subdivide them, and subdivide them again, a certain number of times, and then figure out the percentage of the slate and stone.

Q. But you don't know whether there is any other authority over them to check their grading?—A. I don't know whether the Government of late years particularly has had a rigid inspection. The trouble has been that owing to the shortage of coal we—when I say "we" I mean the retailer generally has not been in position to say "The last coal you sent us is not good." It is "For heaven sake send us more coal."

By Mr. Cowan:

Q. Does that shortage of coal exist over there to-day?—A. No, sir, it does not.

Q. Then we should have an improvement?—A. Yes.

Q. If there were regulations over there the Government could now enforce them if they wanted to?—A. I think they are doing it to-day. I think they are making for a better preparation of anthracite to-day.

By the Chairman:

Q. The people who buy their coal now are more likely to get a good quality of coal than the people who wait until the fall when the demand is so great that they are glad to get anything?—A. That is quite reasonable, I think, to say that if people are not willing to take the coal when there is a certain amount of competition in the wholesale market it stands to reason that they are going to get a better article than when shortage eliminates competition and the retailer is glad to get what he can.

By Mr. Maharg:

Q. Coming back to the grading, are you prepared to recommend some system of inspection at the mines, that is some system of Government inspection or check at the mines to protect the public?—A. By the Canadian Government.

Q. By the Canadian Government. Yes.—A. Well, I think the ideas of the seller, the producer and the seller would have to be consulted in that regard. He might take the stand "There is our coal. Now you can take it or not just as you like."

Q. That would apply to the American of course. But if we had a system of inspection in our mines it would apply to them all?—A. We have not any Canadian anthracite mines. We are speaking about anthracite coal now? Q. We have a lot of other coal that needs inspection as much as the anthracite coal?—A. I think at least the Government should have some standard. I think, as I said before, I know all coals are not of equal value and that, if a standard of value were put on the coal and the producer made to live up to that standard, why, it would be a fair deal to the people.

Q. Well, the coal producers are about the only producers that there is no check on in Canada?—A. Take the case of anthracite or steam coal, of course you understand that it might cost more to prepare the coal than that preparation warranted as far as the value was concerned.

Q. That is it might come back on the consumer, that is, it would cost him just as much as it costs him now for the dross he is getting.—A. In conference with some of these producers they said "We can give you hand picked coal" but that would cost a lot of money.

Q. You don't have to have it hand picked, to pick the slack out?—A. Not to take the slack out, not in the case of soft coal.

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By Mr. Cowan:

Q. I want to correct the witness. I do not think it should go uncorrected in the official record. You said we have no anthracite in Canada, you mean as far as Ontario is concerned?—A. Yes.

Q. We have too, there is one in Alberta, awaiting development?—A. I quite understand, I realize you are correct.

By Mr. Maharg:

Q. Did you have any quotation for Nova Scotia coal this year?—A. I mentioned it a little while ago, that recently, within the last few weeks, we asked for a price on a large quantity of slack and our quotation from the Dominion Coal Company I presume was over a dollar a ton on American coal on cars at Ottawa.

Q. And that was due to the freight?—A. They merely quoted us a rate on cars at Ottawa. I do not know how they figured their cost on freight.

Q. What was that quotation?—A. On slack coal it was \$9.95 a net ton on cars at Ottawa.

Q. They never quoted you a price at the mine, that is the Nova Scotia coal?—A. We are not interested. We would rather they would quote us a price at Ottawa.

Q. Did the other people quote you at the mines or delivery at Ottawa?—A. They quoted us at the mines.

Q. That suits you alright?—A. It suits us alright; because the tariff is published, and the freight rate is fixed. They quoted us at the mines and the freight rate at Ottawa is so much.

By Mr. Cowan:

Q. And as a matter of fact you have no knowledge, at all in buying coal yourself as to what it would cost you to bring the coal from Nova Scotia, provided you undertook to buy it at the mine mouth, have you?—A. No, sir.

By Mr. Douglas (Cape Breton).

Q. And for slack from the American Companies the quotation you got was what?—A. The American quotation varied a great deal in this respect, that for spot delivery, that is for present delivery, we get very low quotations at the mines, but on contracts extending over a period of eight or ten or twelve months we would probably have to pay from 75 cents to a dollar more than we could actually buy it for to-day and take delivery to-day.

Q. I am talking about slack coal delivered in Ottawa under contract, what would that cost you?—A. It would cost us about \$8.50 on cars.

Q. How is that made up? What part of that is freight?—A. That would be based on the price of about \$2.75 or three dollars at the mines.

Q. The rest being freight and exchange?—A. Yes, and duty. There is fourteen cents duty on slack coal.

By Mr. Maharg:

Q. That is about \$1.40 less than Nova Scotia?—A. Yes.

By Mr. Douglas:

Q. How does the freight rates compare with freight rates, say in 1914?—A. On soft coal?

Q. I think that question was asked before.—A. I pointed out that the freight rate on anthracite has increased \$2.65 plus the exchange since 1914, but the freight rate on soft coal has not been quite as much.

By the Chairman:

Q. A different rate on soft coal?—A. Yes, it is a lower rate. In 1915 we bought run-of-mine coal, market coal at \$4 a ton f.o.b. Ottawa.

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By Mr. Cowan:

Q. In 1914?—A. In 1915.

Q. Soft coal?—A. Yes, steam coal, the very highest rate of American coal at \$4 a ton, in Ottawa to-day we are paying \$4.63 freight on the same coal.

By Mr. Douglas:

Q. How is that \$4 made up?—A. I could not say, because I looked up these invoices to try and figure out what the freight rate was. I went down to the Grand Trunk people here to try and get the old freight rates, but I could not, but I looked up our old invoices, and I found instead of being quoted at the mines, it was quoted and sold to us at \$4 a ton in bond in 1915, freight paid to Ottawa.

Q. \$4 is the run of mines?—A. Yes, \$4 is a run of mine.

By Mr. Cowan:

Q. Do I understand that it was at that time they were bringing in Nova Scotia coal land laying it down across the river in competition with this?—A. Yes.

Q. They would not have been buying it over here unless they had been getting it as cheap if not cheaper?—A. Of course, they had, as I pointed out the advantage of having water facilities.

Q. Which can be provided again though? That can be provided again as well as in 1915?—A. Yes. This firm has water facilities still, but it would cost them as much to get the coal from the rail terminal to their plant, and now they have water facilities.

Q. Might I ask if the witness knows the local freight rate on this quality of coal from Montreal to here?—A. I figure \$1.20 by rail.

Q. \$1.20?—A. Yes, I think so, I am not sure.

By Mr. Douglas:

Q. Would you express any opinion as to the cost of barging it from Montreal to here?—A. I think barging it from Montreal to here would be about \$1.20 or \$1.25 possibly. The present freight rate is a little higher than \$1.20?—A. I think it is.

Q. I think as a matter of fact the witness gave it as \$1.20?—A. I am not sure, I think it is more than \$1.20 to-day, sir.

Q. More than \$1.20?—A. Yes, I think so.

Q. Perhaps the witness gave \$1.45, I am not sure about that?—A. Possibly. As I say we were not interested. We presumed these people figured on the usual charge and they gave us the freight f.o.b. Ottawa.

By Mr. Cowan:

Q. Your evidence shows to me very conclusively that Ottawa is a possible market for bituminous coal.—A. I maintain the bulk of domestic trade is anthracite and I think will continue to be anthracite so long as anthracite is available, which I personally think will be for many years to come.

By Mr. Maharg:

Q. If you could get the coal at the same price in Nova Scotia that you could get it at the American mines there would be no question about Ottawa being supplied with Nova Scotia coal?—A. In so far as its need for a soft coal are concerned.

Q. I am speaking of soft coal.—A. Yes. Now you spoke yesterday about the Dominion Government using soft coal.

By Mr. Cowan:

Q. I might say in calling for tenders, in their specifications they specify coal equal to the best Sydney coal, or coal from the best Sydney mines. They set a

[Mr. J. M. Hurcombe].

standard to that extent. But the most of it supplied under that standard is American coal, all of it, I suppose?—A. Yes, all that has been so far.

The CHAIRMAN: Anything further, we are finished with the witness. Alright, sir, I thank you.

Mr. COWAN: I got some information here this morning that was very pleasing to me.

The CHAIRMAN: Now you will hear from Mr. Louis Simpson, an engineer of the city.

Mr. LOUIS SIMPSON, called, sworn and examined.

By the Chairman:

Q. Your profession, Mr. Simpson?—A. I am a construction, mining and consulting engineer. I have written out a statement, Doctor, and with your permission I will read it as it is entirely on technical matters, and I thought it would be better that I should read it than that I should speak it.

(Statement read as follows.)

Louis Simpson,

Industrial, Mining and Consulting Engineer, Member of Canadian Institute of Mining and Metallurgy—American Concrete Institute and American Electro-Chemical Society.

Have had in Canada 34 years' experience in the manufacture of textiles, in the building and erection of machinery and in the planning and construction of factories and power houses.

I planned and constructed the first hydro-electric power house operated in Canada. In the power house certain improvements of my invention were tried out successfully. These improvements have since become standard and have made possible the large hydro-electric developments of to-day. Fifteen years ago I recognized the possibilities of the electric reduction of Canada's iron ores. It was at my request that the then Government of Canada appointed a commission to investigate these possibilities, with the direct result that Sweden has nearly altogether adopted that system of iron ore reduction, and with the indirect result that the electric steel refining furnace was introduced to this continent, thereby, during the late war, making it possible for Canada to produce large quantities of steel for war use.

I have made the light, heat and power situation of Eastern Canada a special study during 30 years.

At the request of your chairman I have the honour to present to you a compilation of a report made to the Dominion Government by Dr. I. B. Porter and Mr. R. J. Durley and published by the Department of Mines in 1912, entitled "An Investigation of the Coals of Canada with reference to their economic qualities, as conducted at McGill University, Montreal.

This report unfortunately was published in a way that has made it not easily or quickly understandable by the non-technical reader. It was thought that a tabulation of the results arrived at and a brief explanation of those results, would be informative to the members of the committee, and also to those of the public who take an interest in the committee's investigation.

I would point out that the commercial value of fuel is governed chiefly by the British Thermal Units present, but that the result thus obtained has to be modified when certain other constituents are present in unduly large percentages. I refer to such constituents as ash, moisture and sulphur, the presence

[Mr. Louis Simpson].

of any of which is objectionable. All coals contain these constituents in greater or less percentages, but the less they are present in coal the higher the quality of that coal.

In practice, not all the British Thermal Units contained in fuel are made available as heat. In combusting the fuel there is always a loss which is small or large, according to how the coal is combusted. It is usual to speak of the loss by terms of percentage of efficiency. In domestic practice the efficiency is generally *very low*. It is claimed that usually the efficiency rarely exceeds 30 per cent and may be below 20 per cent. The enormous loss of heat thus indicated is caused chiefly by:

1. The escape of the gases of combustion into the atmosphere at unnecessarily high temperatures.
2. The production of gases which yield less heat, such as $C O$, instead of gases that yield in their production the maximum of heat; such as $C O_2$. The latter is the result of complete combustion.
3. The loss of heat caused by the moisture contained in the fuel.
4. The use of too much or the improper use of air, which, without serving any useful purpose in securing perfect combustion, passes through the furnace and passes away up the chimney carrying off heat units.
5. The heat lost, being the heat contained in the ash, cinders or clinkers removed from the furnace.

It is evident that fuel containing any constituents that may increase the heat losses, above mentioned, must reduce the theoretical value of the fuel as calculated by the British Thermal Units contained. But some of these constituents possess other deleterious qualities, for instance, certain coals contain ash that is very destructive to the fire bars—or ash that requires special and constant attention, otherwise the fire becomes dead. The presence of a large percentage of sulphur is usually very objectionable, and for some purposes fatal to the use of the coal for those purposes.

Moisture, when present in fuel in any considerable percentage, causes a loss of efficiency that may be very serious. This is one of the often overlooked objections to peat fuel.

The proportion of the volatile contents in coal to the fixed carbon contents determines whether the coal is anthracite, semi-anthracite or bituminous. Anthracite contains large percentage of fixed carbon, with but a small percentage of volatile matter.

In combustion the volatile contents are first driven off and burned. When the volatile contents are considerable, the quantity of hydro carbon gases which have be combusted is at first very large. The quantity of these gases gradually decrease as combustion proceeds. The combustion of those gases when the combustion is undertaken in an open fireplace produces a brilliant fire when the supply of air is sufficient, but as the gases decrease in volume the fire becomes dead.

It is this quality that causes the use of bituminous coal to be more laborious when used for household purposes than is the use of anthracite coal. The latter coal being chiefly, fixed carbon, has no large extra quantities of an highly inflammable gas to be taken care of, when fresh fuel has been supplied to the furnace.

The work of stoking a domestic furnace with bituminous coal is not only very much more arduous than that of stoking a furnace with anthracite coal, but it also requires more knowledge and experience to secure economic results.

Bituminous coal can only be economically consumed in furnaces specially designed for its combustion. Its combustion, in furnaces designed for the combustion of anthracite coal, while possible, is very much more difficult and can seldom be secured with even a relative efficiency.

[Mr. Louis Simpson].

For domestic use a fuel is required that does not require watching in order that the necessary volume of air required for efficient combustion may be made available.

Having been called upon at very short notice, I have, considerably, been permitted by your Chairman to present the remainder of my evidence at your next meeting, but I am prepared to answer any questions based upon the evidence I have now given, and I will say that my answers will be given without any reservations, so long as the knowledge I possess makes me competent to answer them.

In presenting the compilation before referred to I would desire to call the attention of the committee to the reported values of the Inverness and Port Hood coals. A previous witness has stated that these coals are superior to the Sydney coals. Personally I have no interest in either of these coals, but I am obliged to state that the result of the analysis made at McGill University does not warrant any such contention.

In the Inverness coals, in one case the moisture contents are over $2\frac{1}{2}$ times that of the Sydney coal, in the other case the ash is $2\frac{1}{2}$ times that of the Sydney coal. Sulphur is, generally speaking, very much higher, being of an average of $6\frac{1}{2}$ per cent in the Inverness coals as against an average of less than $2\frac{1}{2}$ per cent in the Sydney. Moreover the British Thermal Units in the Sydney coal average 13,800, which the Inverness coal contains only 12,800 and the Port Hood coal only 11,770.

It will however be noted that the Inverness coal contains a large percentage of volatile contents, and thus would give brilliant appearing results, when combusted in an open fireplace. The heat value of the Inverness coals, as shown, is very much lower than that of the Sydney coals, even without making any deductions for losses consequent on the high moisture content of the one and on the high ash content of the other two Inverness coals. The very high sulphur contents, alone, would prevent the use of this coal for metallurgical purposes, unless the sulphur contents could be very considerably reduced which, if possible, and which is doubtful, would cost money.

I would further call the attention of the committee to the very great variations of the several percentages shown in the tables now submitted.

Moisture contents vary from 0.9 per cent in Acadia Mine coal up to 30.9 in the Estevan lignite.

It must be mentioned that the percentages of ash, sulphur, etc., are all calculated upon the several coals, after the coals have been dried. In comparing the B.T.U. of a coal low in contained moisture with one high in contained moisture, allowance will have to be made for the extra contained moisture thereby reducing the B.T.U. value contained in the lignites, as mined, very considerably.

WITNESS: These two tables (indicating) gentlemen, I have taken out of these returns of 1912. I suppose the samples would have been taken in 1910, or 1911, but I have taken figures here quoted, except in the coals, of British Columbia, which I did not think would be of interest, in connection with your inquiry. I think if you, in your judgment, order these to be printed, you will find them of great use to you. It will save you asking a great many questions. You will be able, by looking at these charts, to see exactly how the coal varies. You may, for instance, use a coal in the furnace which has been contracted for as anthracite, and then you can look up and see from this chart, the quality of that coal; then another coal may be used which will give a poorer result and you can tell from this chart why it gives you that poor result.

I have put on here, first of all, the name of the mine, the firm, and the seam whenever it is given. Then I have the moisture in the coal mines, that is, the per-
[Mr. Louis Simpson].

centage of moisture variations—as you know moisture varies, very, very much. I have one here that is .9 lignite and semi-lignite goes up very high. Then I have the ash, and there the variation is very, very great; in one case, there is a mine out west, with nearly thirty per cent of ash—I would hardly call that coal. We have another mine in the east that gives nearly nineteen per cent, whilst there are other mines that only give about four per cent of ash, which is pretty low. Then as to the volatile contents; there is also a variation in the fixed carbon, and in the total carbon, that is, the carbon that is contained as fixed carbon and the carbon in the volatile contents which are hydro carbons. Then the sulphur, and as I have mentioned, high content of sulphur is very detrimental. Then the British Thermal Units, which are the basis for calculating the value of the coal for heating.

These, Mr. Chairman and gentlemen, I will fyle.

The CHAIRMAN: Does the committee wish to have these reports in the record?

Mr. DOUGLAS (Cape Breton): Have we had anything similar before?

The CHAIRMAN: No.

Mr. DOUGLAS (Cape Breton): I think it would be good information.

WITNESS: Perhaps you would like to see them.

The CHAIRMAN: I presume you did not want them read.

Mr. MAHARG: Do they appear in any of the mine reports?

The WITNESS: Yes, but there are about fifty of them to go through. (Indicating reports).

By Mr. Dóuglas (Cape Breton):

Q. These tables are simply a digest of the reports?—A. Yes.

Mr. DOUGLAS (Cape Breton): Certainly; put them in.

Mr. MAHARG: Surely, if we have had nothing similar.

WITNESS: I thought they would be of use to you that is why I took the trouble to compile them.

Mr. DOUGLAS (Cape Breton): They should be valuable.

Mr. MAHARG: It would also be valuable to the consumers of domestic coal.

WITNESS: To everybody in Canada, and gentleman, I would like to say that in the past a great deal of literature published by the Mines Department has been of little use to the man on the street, because of the way it was compiled; it was compiled more for professors of Universities, and people like that, and it is a great pity.

The CHAIRMAN: These statements will then be inserted in the record.

COMPARATIVE VALUES OF CERTAIN CANADIAN COALS, ANALYZED BY DR. PORTER AND MR. DURLEY AT MCGILL UNIVERSITY, MONTREAL.

Name of Mine, Firm and Seam	Moisture in coal as mined	Ash.	Volatile Contents	Fixed Carbon	Total Carbon	Sulphur	British Thermal United
	%	%	%	%	%	%	BTU.
Dominion Coal Co., Ltd.,							
Mine No. 7.....	3.5	5.9	86.5	57.6	76.7	2.0	13,860
" 9.....	2.4	5.9	38.6	55.5	77.0	3.7	14,000
" 5.....	3.4	5.5	35.0	59.5	78.6	1.8	14,040
" 1.....	3.5	5.9	34.3	59.8	78.6	1.9	14,010
" 10.....	4.0	11.1	35.1	53.8	73.3	2.5	13,120
" 12.....	4.9	4.8	37.3	57.9	77.6	1.8	13,790
Nova Scotia Steel & Coal Co.							
No. 1.....	3.5	7.2	37.4	55.4	75.4	2.9	13,770
No. 3.....	5.4	6.7	39.0	54.3	74.9	2.5	13,680
Inverness Coal & Railway Co., Inverness.....	9.3	6.5	42.5	57.0	70.0	5.0	12,800
Richmond Railway Co., Port Hood.....	4.7	14.6	37.1	48.3	63.7	7.9	11,770
Acadia Coal Co., Ltd.—							
6 foot seam.....	2.1	17.3	32.1	50.6	68.0	1.0	12,020
Four seam.....	2.6	11.3	33.3	55.4	74.1	0.6	13,230
Third seam.....	2.0	14.7	29.8	55.5	71.4	1.4	12,580
Gage pit seam.....	0.9	10.5	31.4	58.1	74.2	3.6	13,180
Westville Main.....	1.8	9.2	26.0	64.8	77.6	0.9	13,860
Intercolonial Co., Ltd., West- ville Main.....	1.4	14.5	24.7	60.8	72.6	2.5	12,960
Cumberland Ry. & Coal Co.							
Mine No. 1.....	2.2	3.4	33.3	63.0	81.5	1.0	14,190
" 2.....	2.8	9.2	32.3	58.5	75.1	1.6	13,370
" 3.....	2.8	11.5	33.5	55.0	73.1	1.8	13,000
Maritime Coal, Ry. & Power Co., Chignecto, N.S.....	3.6	13.3	41.0	45.7	66.2	6.4	12,150
Minudie Coal Co., Ltd., Minudie, N.S.....	3.8	15.5	35.7	48.8	64.8	6.7	11,830
Canada Coals & Ry. Co., Joggins, N.S.....	1.3	18.6	36.6	44.8	63.5	5.4	11,590
G. H. King, Minto, N.B.....	1.3	14.4	32.2	53.4	70.3	5.8	12,890

The value of coal depends upon the contained B.T.U.'s allowance to be deducted for excess of sulphur and excess of ash over and above stated percentages, such as 2% for sulphur and 6% for ash.

COMPARATIVE VALUES OF CERTAIN CANADIAN COALS, ANALYZED BY DR. PORTER AND MR. DURLEY AT MCGILL UNIVERSITY.

Name of Mine, Firm and Seam	Moisture in the mined coal	Ash	Volatile Contents	Fixed Carbon	Total Carbon	Sulphur	British Thermal Units
	%	%	%	%	%	%	B.T.U.
Western Dominion Collieries, Taylorton, Sask.....	28.6	8.1	49.0	42.9	59.8	0.6	10,690*
Eureka Coal & Brick Co., Esteran, Sask.....	30.9	16.8	40.0	43.2	57.7	0.5	10,820*
Strathcona Coal Co., Strathcona, Alta.....	22.7	11.4	41.0	47.6	62.9	0.4	10,730
Parkdale Coal Co., Edmonton, Alta.....	22.5	10.9	37.8	51.3	65.3	0.4	10,910*
Standard Coal Co., Edmonton, Alta.....	23.5	8.1	42.0	49.9	65.6	0.4	11,360*
Canada West Coal Co., Taber Alta.....	13.0	14.1	36.0	49.9	64.5	1.4	11,040*
Alberta Ry. & Irrigation Co., Lethbridge, Alta.....	8.4	11.0	37.5	51.5	66.5	0.8	11,710*
Lund-Breckenridge Coal Co., Lundbreak, Alta.....	5.0	29.7	80.1	40.2	54.8	1.2	9,810
Leitch Collieries, Ltd., Passburgh, Alta.....	1.9	17.9	27.0	55.1	70.0	0.6	12,240
Hillcrest Coal & Coke Co., Hillcrest, Alta.....	3.0	15.3	29.3	55.4	70.4	0.6	12,460
West Canadian Collieries—Bellevue No. 1.....	0.9	15.5	27.6	56.9	71.5	0.8	12,380
Lille Colliery No. 1.....	1.7	16.4	25.0	58.6	71.2	0.5	12,470
International Coal & Coke Co.—No. 2 Seam.....	2.0	19.8	25.1	55.1	68.5	0.4	11,720
No. 4 Seam.....	2.0	16.2	23.9	59.9	72.6	0.6	12,532
Crowsnest Pass Coal Co.—Michel No. 3.....	1.4	12.5	24.8	62.7	75.5	0.5	13,270
No. 7.....	1.9	11.9	22.6	65.5	76.5	0.4	13,360
No. 8.....	3.0	10.2	24.1	65.7	76.1	0.6	13,480
Hosmer Mines, Ltd.—No. 2 South.....	1.7	15.3	21.3	63.4	74.4	0.3	12,710
No. 6 South.....	2.6	12.4	25.6	62.0	75.9	0.6	13,090
No. 8 South.....	4.0	7.5	28.0	64.5	79.8	0.6	13,990
Crowsnest Pass Coal Co.—Fernie No. 2.....	2.2	9.0	26.3	64.7	79.3	0.5	13,820
No. 5.....	1.6	10.8	24.0	65.2	77.1	0.5	13,480
H. W. McNeil Co., No. 1 Canmore.....	1.2	12.3	17.2	70.5	74.6	0.8	13,210
Bankhead Collieries, Ltd.—Bankhead.....	1.0	12.2	11.8	76.0	79.4	0.6	13,320

*The value given of B.T.U.'s must be reduced to correct the excess of moisture which should not exceed 4%.

By Mr. Douglas:

Q. I am afraid that your statements perhaps are a little ambiguous. I mean the statement of comparisons which you made between Inverness and Sydney coal. You made a comparison between them rather against the Inverness coal. Of course, the Inverness coal is pretty good for general purposes.—A. I should think it would be; it gives a bright fire.

Q. It has the reputation of being excellent household coal?—A. Yes, that may be through the physical qualities, but I have only gone by the testimony of these reports.

Q. The analysis is rather unfavourable in comparison with the other fields?—A. It is better than the Joggins coal, you know. I was not slanging them, but I wanted you gentlemen to be informed on the facts, as far as I had them.

[Mr. Louis Simpson].

Mr. COWAN: Is that the field where Dr. Chisholm said they had nine billion tons?

The CHAIRMAN: Yes.

Mr. MAHARG: Nine billion tons?

Mr. COWAN: That is nothing; we have more than that out in our own fields.

By Mr. Douglas (Cape Breton):

Q. You did not make any comparison between Sydney coal and Pictou coal?—A. It is all upon the list there. I have only mentioned the Inverness coal because you had before you a gentleman who claimed something that I did not think he could quite claim, and therefore, I thought it was only right to make you wise. It is for you to judge. I have no interest one way or the other.

By Mr. Cowan:

Q. You are evidently pretty well up on these Government reports in geology. Did you see the report issued by the Government of the Sheep Creek Mine, owned by Pat Burns. Would you please tell me whether or not you consider that to be an anthracite coal and of what quality?—A. Where is the analysis, Doctor?

Q. You have it there. It is all Greek to me, and I want to know whether it is anthracite, or semi-anthracite, or what?—A. It is semi-anthracite, very much upon the anthracite side.

Q. It is really better anthracite than semi-anthracite?—A. Yes, because it only contains thirteen percent of volatile matter. That is what I gave you in my explanation. There is one here that contains twenty-one per cent, sample No. 13, but most of them run about thirteen per cent. I think some of the Pennsylvania anthracite goes down to five or six per cent of volatile matter.

Q. What quality of coal would you consider that to be? That is what I want to find out. Just what is it?—in good ordinary every-day terms?—A. The ash is high. There is ash here that runs up to twenty-five per cent; that is very high (referring to sample No. 5). Then there is sixteen, nineteen, fourteen, nine, twenty-five, thirteen, twelve, seven, and so on—the ash is high.

Q. These are different mines?—A. I know that, but you have asked me and I am only giving you from the record. Here is a good one. (Sample No. 4). This is the best. It is 13,787, B.T.U's (British Thermal Units). You have one here. (Sample No. 8) that is 14, thousand plus; the ash is very low.

The CHAIRMAN: You are asking the witness to give a statement—

Mr. COWAN: I want to find out from the witness whether or not in his opinion, in that locality, and according to this report, we have anthracite or semi-anthracite coal.

By Mr. Cowan:

Q. Give us that in good ordinary terms, that good ordinary people can understand.—A. I consider this comes very nearly being anthracite; there is one that comes very fully up to anthracite. I will mark them. (The witness marks samples No. 1, No. 4, No. 8, No. 13, No. 14, No. 17, No. 23, and No. 25.)

Q. They are all in the same locality, and the point I wish to bring out, Mr. Chairman, is that we have in that district large quantities of what is really anthracite coal, according to Government records, and which is not yet developed.

By Mr. Maharg:

Q. There is one point I would like to get cleared up in my mind. I have not seen you draw any distinction, not particularly from this witness, but from other witnesses, between the term "soft coal" and "steam coal"; have you got a soft coal you use for steam purposes, and another soft coal you use for stove or domestic purposes?—A. There is no proper distinction, though steam coal is generally finer than household coal. A good household coal is lump coal.

[Mr. Louis Simpson].

Q. Out of the same mine?—A. Out of the same mine. They screen out the slack which is sold as steam coal.

Q. That does not apply to our western coal at all?—A. I do not know your customs out west.

Q. Our western steam coal, to my knowledge, is never used in the stoves at all, but it is used extensively in heating plants, hot water plants, and steam plants in houses, blacks and so forth.—A. I have, in times past, bought fifteen thousand tons a year, and I have bought soft coal almost entirely from Nova Scotia until the time when they became too dear, and then it was bought from the States. The same concern is still buying from the States.

Q. What we term our domestic coal is never used in steam plants or on railroads.—A. You may have some semi-anthracite out west, but I do not know whether it is sold true to name or sold by a fancy name. You may be buying a semi-anthracite as domestic coal.

Q. We use that semi-anthracite coal as domestic coal as well.—A. Yes.

Q. But we have all kinds of coal—apparently we have more specimens or varieties of coal than you have here?—A. Yes, you have.

Q. But our steam coal and our domestic coal for use in the homes are as far apart as the anthracite coal and steam coal.—A. That is very interesting.

Q. We will get in our steam coal fully one-half fine dust, then you will get large chunks such as you could hardly lift—they will both be in the same coal. It is not a screened coal. That may account for the reluctance of the people here to use what you call domestic coal in their homes. We would not think of using steam coal in our homes; it runs together into a mass and we could not use it. It is a splendid coal for steam plants and hot water plants, but it is never used in the homes at all. You mentioned something about the soft coal used in the homes as being more laborious or something to that effect,—that there was a great deal more work connected with it?—A. Yes.

Q. We did not find it so to that extent with our steam coal, or what we term domestic coal—bituminous coal.—A. There must be something there that does not exist in the East, because when I was living in the province of Quebec in the winter-time, my gardener took care of the furnace in the day-time, but at night I went down and stoked myself. I did it because I liked to see that things were done right, and it was a check upon my gardener, don't you know. I am speaking from my own experience. I did use in that same house at one time a soft coal, the same as we used in the boiler-house at the factory, they sent me the big lumps; but as soon as I could I put a furnace in for hard coal, and it was a great deal less work.

Mr. COWAN: Your experience has been different to mine. My good wife has used ordinary bituminous coal in the kitchen range for the last thirty years, but since we have come down here to Ottawa, we have had a range in which we use anthracite coal, and I have heard her complain twenty times as much in the three months' period since we came down here than she did in the whole thirty years out west.

WITNESS: I was not referring to a cooking range; I was referring to a furnace within the house, and I can understand that conditions might be quite different in a cooking range than in a furnace.

Mr. MAHARG: I would like to follow this up a little more. There seems to be a certain amount of prejudice against soft coal in the homes through here. I was probably under the impression that it was purely a prejudice, but in your remarks here to-day I gathered between the lines, that there was no distinction made between the coal you use in your factories and the coal you use in your ranges.

WITNESS: Only as to size.

By Mr. Maharg:

Q. Only as to size?—A. Yes.

Mr. MAHARG: It is entirely different with us, but it may be that the people using the eastern coal here have a just prejudice against it, while the people when we speak to them of using western coal have in mind the results from the eastern coal and are prejudiced against the western coal. I can corroborate what Dr. Cowan says, regarding the use of coal in the stoves. I have, living on my farm, people who formerly lived in Toronto, and used this anthracite coal, in their stoves. They would not go back to anthracite coal in the West now if they could get it for nothing. They are using domestic western coal, and they would not think of going back to anthracite. They prefer it by far to what they had to use in the city of Toronto.

WITNESS: I think for the cooking range, what you say would be quite correct. You understand that in a great many parts of the East, they are using gas for cooking, or the electricity. I have used in my house no coal whatever for cooking, for the last twenty-five years. I was one of the first to use electricity for cooking.

Q. That would equally apply to hot-air furnaces, hot-water furnaces, and to steam pants?—A. Yes, sir, but most of the coal in the West is used either for the furnaces, to heat the whole house, or base-burners.

Q. No, it was not due to the base-burners in the West. We used to have the base-burners, but anthracite was used in them.—A. There are quite a number of base-burners used in the small houses of the East to heat the houses, and in those we find that hard coal, as it is called, gives the most satisfaction in the East.

Q. I can realize that, but in ordinary heating plants in the West, we get just as good satisfaction from either the steam coal—the regular steam coal—or what we call the domestic coal, that is the bituminous coal. On my farm those same people who always used anthracite in their heating plants as well as in the stoves are using the western soft coal in the furnace, and we have rather a severe climate in the West, and they have no difficulty. The fire has never been out for the entire winter, using the soft coal.—A. In my explanation, I tried to call your attention to the difficulty of burning soft coal in a furnace that has been designed for hard coal. I think that is where the trouble is.

Q. No, you require absolutely no change in your range or furnace or steam plant or hot water furnace. We require no change whatever, because we have burned both—or rather the three different kinds.

Mr. DOUGLAS: Is it not a fact, Mr. Maharg, that the witness has had no experience with western coal?

WITNESS: None whatever.

Mr. DOUGLAS (Cape Breton): I think we should have a witness or two on that point. It is a very important point.

Mr. MAHARG: We have proven that by actual experience.

WITNESS: I do not think you should say there is prejudice against the western coal.

Mr. DOUGLAS (Cape Breton): It is lack of knowledge?

WITNESS: I do not think they would have much interest in it, because I hardly think it is possible to bring any western coal east of the Great Lakes. I mean it is not commercially possible. Anything is possible, but it would not pay to do it, and so we have not had to investigate it.

Mr. COWAN: One point that occurs to me is that if there is any similarity as between the western bituminous coal and the Nova Scotia bituminous coal—that is the western coal—surely that portion of Ontario which is served by Nova Scotia could become accustomed to it by education, into the use of Nova Scotia coal.

[Mr. Louis Simpson].

WITNESS: There is a quantity of soft coal down in Nova Scotia. I lived there about thirty years ago, but I was not as interested in the coal situation as I am to-day, so I made no investigation.

Mr. DOUGLAS (Cape Breton): It is used there exclusively.

WITNESS: The people in the towns use hard coal.

The CHAIRMAN: I do not think there is much difference between the West and western Ontario, anyway, excepting that we get little or no domestic coal from the United States. We use the anthracite because it is available, but occasionally we do get domestic soft coal which I think probably is similar coal to what you speak of using in the West, a fairly hard and lumpy coal—

WITNESS: Yes.

The CHAIRMAN: Not anthracite. I used some of it and so far as my very limited knowledge goes—my own personal experience is that it is very satisfactory in the ordinary furnaces, provided they are equipped with good flues; you require good flues.

Mr. MAHARG: We are not particularly interested in the West; we have all kinds of coal as far as that goes, but the committee is here to solve the problem for the whole of Canada, particularly Ontario, and that is why I am probably labouring on this point so much, but we have had experience with the Yougheny Valley coal from Pennsylvania. A number of years ago—I do not know why, but there was some of that coal sold even as far west as Central Saskatchewan. We had some of it ourselves. It was very, very unsatisfactory as compared with our western coal; it was smoky and dirty and almost like our lignite coal as far as dirt and smoke were concerned, and I can understand how it is if people used that coal they would become prejudiced to western coal, if they did not actually know the quality of our western coal. Just a little farther: Have you made any comparison—no doubt you have as you have the statistics available for it—between the anthracite coal and what you call soft coal for heating plants and domestic houses?—A. Just what do you mean?

Q. The relative value of the two coals for heating purposes, taking into consideration the costs?—A. No, and I do not see how I could arrive at that, because the costs vary so enormously, and the conditions vary very much, and you could not get at a proper basis.

Q. Take it by quantity, ton for ton, of this soft coal as compared with the anthracite coal for domestic use.—A. I do not think comparisons have ever been made. The conveniences of using good anthracite coal are so apparent in the East that everybody that could afford to arrange their houses for that fuel adopted it.

Q. We were just exactly in the same position, Mr. Simpson. Take my own personal experience with it. When we put the hot-water plant in our house, we were of the opinion that we had to have anthracite coal, and we used anthracite coal for several years.—A. Yes.

Q. But there came a time when anthracite was not only hard to get but of a very high price, and we turned to what we call our steam coal; not the coal we used in our ranges at all, but an entirely different coal—a purely steam coal.—A. What kind of a furnace have you, a Daisy furnace, a plate furnace, or a pipe furnace?

Q. You mean for the flues?—A. In the heating.

Q. Inside.—A. The heating inside?

Mr. MAHARG: It is the reverse.

WITNESS: The plates—

Mr. MAHARG: Not the plates.

WITNESS: Have the plates a passageway, with water inside?

Mr. MAHARG: No, it is a corrugated surface over the fire-box, a heavy corrugated surface, and it passes back and forth through it.

[Mr. Louis Simpson].

WITNESS: That is different from what is used here.

MR. MAHARG: My point in this: that we can always get the soft or steam coal for about half the price of the other, and we have been able to heat our houses practically with the same weight of coal.

WITNESS: The heat you will get from that coal will depend upon the heat that is in the coal to start with, and your efficiency afterwards.

MR. MAHARG: I quite agree with you.

WITNESS: There is no reason why the soft coal should not be used, but I want to point out that probably the greater percentage of furnaces in use in the East would have to be scrapped.

MR. MAHARG: I do not see why they would.

MR. COWAN: The house I lived in until quite recently in Regina was heated by a hot vacuum plant. It had an ordinary boiler, manufactured in Montreal, a tube boiler, and we used nothing but the soft steam coal in it, and I would not be bothered putting anthracite into it, as it is too much trouble, is too dirty, too many ashes, too many clinkers, too many rocks, and everything that is disagreeable.

WITNESS: You must have had some bad anthracite.

MR. MAHARG: Your general statements are so completely at variance with the experiences we have had in our own homes—

WITNESS: Yes?

MR. MAHARG: You spoke of the convenience—you say you had a gardener whom you said looked after that for you, and you yourself had nothing to do with it. Unfortunately we in the West have no such convenience, at least I have not, and when I am away, the work usually falls back on my wife, and while she did not like the steam coal at the start, to-day you could not get her to go back to the anthracite coal. She claims it is far less dirty and far less trouble. The fires will last for forty-eight hours without touching them at all in the mild weather. It seems to me to be a matter of education.

THE CHAIRMAN: It is usually a question of what grade of soft coal you get in the East. The great bulk of the soft coal that is used in Ontario is of an inferior grade, and when I say "inferior" I mean broken down soft coal, for the simple reason that it is much cheaper; it is usually sold to operate our factories and public utilities and plants, and so on, and as I said before there is a grade of domestic soft coal that is coming into western Ontario in limited quantities now, which in my limited experience is quite satisfactory—probably as satisfactory as your coal is in the West.

MR. MAHARG: But, Mr. Simpson, you say that you would have to scrap your furnaces. If that were so, that would immediately put a very strong prejudice against it, and honestly, I do not think that exists. I have an uncle in the city of Toronto to-day who had a hot water plant. The furnace to all intents and purposes was just exactly the same as the one I used in the West. The system was a return circulating system.

WITNESS: That furnace is not the one usually used in Quebec. I do not know what it is in Toronto, but in Quebec they use a plate system.

MR. COWAN: Yes, but my dear sir, I venture to say that ninety per cent of the furnaces in Western Canada, burning this soft coal, are manufactured by eastern men.

WITNESS: But, my dear doctor, these manufacturers will make you up anything that is demanded, because you call for it, but that does not prevent them from making another kind of furnace for the buyers in Quebec, if they call for something else.

MR. MAHARG: I have seen probably half-a-dozen heating plants or so in Ontario, and I can tell you frankly I can see no difference in the structure of them—no more than I see in the average furnaces used in the West for hot air, hot water, or steam systems. I think it is purely a fancy that you would have to scrap your furnaces.

[Mr. Louis Simpson].

WITNESS: I do not know. I have given my opinion as I see it at the present time.

The CHAIRMAN: I think I would confirm Mr. Simpson's testimony that the soft coal which is sold general in Quebec and Ontario would not burn with any satisfaction in our furnaces.

Mr. COWAN: Evidently you are getting an inferior grade of soft coal.

The CHAIRMAN: We have all grades of soft coal.

Mr. COWAN: It is dirty and smoky stuff.

The CHAIRMAN: It answers the purpose.

Mr. COWAN: You import a greater tonnage of bituminous coal into Ontario than you do anthracite?

WITNESS: I think I can show you the way out in regard to the smoky coal which you sneer at—I do not use that word objectionably—such coal may be the best coal for boiler furnaces in factories. It has a high percentage of hydro-carbon in it. These people are importing coal for factory use, but they get an inquiry from a domestic consumer for a little coal, and they fill that order and send out the coal, but it is still of the same quality with the high volatile content. You see my point. I think I have seen the difficulty you are labouring under, and I thought I would compile out of this book, which is a Government publication, a report of all these different coals and I think if the doctor studies them he will see what the difference is. You may have soft coal that will give you a smoky effect, and coal that won't. People have to be educated, but who will educate them? Our schools do not educate them; the schools teach them everything but what they ought to learn, and they do not touch the practical side of life at all.

By Mr. Douglas:

Q. The hard school of custom has educated us in the West?—A. Yes.

By Mr. Cowan:

Q. What would your opinion be as regards the system Alberta has established in Manitoba?—A. I should think it would work out very well if you get the right men to work it. We have to do something because there is great extravagance going on in Canada, in the use of all fuels, and it is simply because our people have not been taught the rudiments of combustion. I was pointing out to the Chairman yesterday in the hall that the steam was in the radiators whilst the windows were all open and it was 74 outside. It was a waste.

By Mr. Douglas:

Q. It was to get the fresh air.

The CHAIRMAN: I might say Mr. Simpson will be returning on Monday to take up with us the oil shale question? He is an authority on that matter and on account of being unable to have another witness here on Monday I took it upon myself last evening to invite him to come and give us that on Monday so as to fill in the time.

WITNESS: With your permission I would just like to say a word in reference to Nova Scotia coal being shipped to Eddy's concern. As you know one swallow does not make a summer." That is an old saying. I know the Eddy concern very well, and I know J. R. Booth's concern very well, and I would say this, that Eddy's are so placed that they are peculiarly favourably fitted to receive coal by the water. On the other hand, J. R. Booth is not so placed. They have railway tracks running into their yard and J. R. Booth's concern for years has bought American coal. Before the war that coal used to be shipped through to Parry Sound and came over his own railway and they have all their unloading and storing appliances are so arranged. It would be almost impossible unless there was a big saving to get J. R.

[Mr. Louis Simpson].

Booth to scrap that unloading plant to get him to go back to the use of Nova Scotia coal which I do not think he has used since twenty years past. In Eddy's case it is different: They used to unload by hand and to-day I don't see any special unloading plant. But there is this trouble, before the war most of the Ottawa mills were cutting a large quantity of lumber. The boats of the Ottawa Forwarding Company were going down to Montreal every day and were coming back empty. Since the war their shipments have been very largely curtailed and probably last year the bulk of the shipments to England left late in the Autumn. No user of coal can afford to take the risks of the boats not going down with that lumber and coming back empty, so that they can bring back their coal, because they might not get in their required supplies for the winter.

By Mr. Cowan:

Q. They will be getting back old normal times before long. The lumber has not ceased to be?—A. I would not like to say that. I don't think anybody knows exactly what we are going to come back to. In my opinion in one year we will not come back to pre-war conditions.

Q. I would hate to think war conditions are going to continue for ever?—A. You know if a patient of yours has gone through some very serious disease he never goes back to the condition in which he was before the disease.

Q. It depends on the physician he has to take care of him.

Mr. DOUGLAS: I would like the committee to authorize the delegates of the labour unions of Nova Scotia to be present before this committee. They have requested to be here and I replied to them, and asked the names of the members of their organization whom they desire to have before the committee and they wired the names of their representatives as a result of a meeting they held down in Nova Scotia in the different centres, and the names are E. P. McLaughlin, W. P. Delaney and R. Baxter. Baxter is president of the United Mine Workers, McLaughlin is secretary and Delaney is a board member, so I would like the committee to authorize that these men be called.

The CHAIRMAN: Is it necessary that the three should come? Is it the wish of the committee that all three men be invited to appear before the committee, expenses to be paid.

Mr. COWAN: What do you include in the term "expenses?"

The CHAIRMAN: There is an allowance for daily expenses.

Mr. COWAN: I think the miners should be represented here. The only question is as to how many. I am of opinion that they should be heard under any circumstance.

The CHAIRMAN: If three are necessary let us have the three.

The committee adjourned until 10.30 Monday, May 2.

HOUSE OF COMMONS,

COMMITTEE ROOM 425.

MONDAY, May 2, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.45 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: We have before the Committee this morning Mr. Louis Simpson on the Development of our oil shales.

Mr. LOUIS SIMPSON, recalled.

By the Chairman:

Q. You have already been sworn?—A. Yes, sir.

By Mr. Chisholm:

Q. Mr. Chairman, before the witness proceeds with the subject of oil shales, I want to ask him a few questions. I will be as short as I can. If you remember the other day I was unavoidably absent and certain evidence was put on the record here. I would like to ask a few questions with your permission.

The CHAIRMAN: It won't take much time. We don't want to spend the day on it.

WITNESS: Might I suggest, Mr. Chairman, some matters have been brought in this connection before me in reference to what I testified to the other day that have to do with the coals, and I have supplemented my remarks to-day with some further information on the coals. May I first of all give that?

Mr. CHISHOLM: I reserve the right to ask the questions I want to ask, inasmuch as this report has gone out. I would like a little more information about it.

The CHAIRMAN: Perhaps you had better let Mr. Chisholm ask his questions.

By Mr. McKenzie:

Q. It is to be noticed that in your evidence you stated the other day that you were ready to answer any questions that might be asked along the lines of the evidence you have given?—A. Certainly. I thought those questions might be asked after I had finished with the coal subject.

By Mr. Chisholm:

Q. Have you had much experience in the question of the heating value of coals?—A. For many years I was responsible for the combustion of 15,000 tons of coal a year and that naturally required that I should pay considerable attention to the heating value of coal.

Q. That is not just exactly what I want to find out. I want to know if you have experience with respect to the analyses of coal?—A. No, I don't pose as being a chemist.

Q. You made a statement the other day with reference to the evidence given before the Committee by a witness. What witness did you have in mind? You did not mention his name. You just simply said the previous witness had stated that these coals are superior to the Sydney coals. What witness did you have in mind?—A. Will you kindly read the connection.

Q. (Reading) "In presenting the compilation before referred to I would desire to call the attention of the Committee to the reported values of the Inverness and Port Hood coals. A previous witness has stated that these coals are superior to the Sydney coals."—A. That was a Mr. MacLennan.

Q. Mr. MacLennan gave evidence here. I read the evidence carefully. I have not yet seen where Mr. MacLennan drew any comparison between the Inverness coal and the Sydney, as far as I can see. You said here that Mr. MacLennan's statement was that the Inverness coal was superior to the Sydney coal. I cannot see that?—A. I was present when he gave his evidence. When I gave my evidence I had not seen the printed report of his evidence upon that and I have to rely upon my memory.

Q. It is dangerous some times?—A. Yes, but it does not often make a mistake.

Q. Mr. MacLennan says here that the Inverness coal is a superior domestic coal. He does not make the two comparisons at all?—A. If I remember rightly he stated it was sold in Halifax at \$1 or a dollar and something over the price of the Sydney coal. That is what I understood him to say.

Q. Are you prepared to deny that? Do you think that is correct?—A. I have not denied it. It is presumed that it would be sold at that advance because it was superior.

Q. Will you, Mr. Simpson, tell me upon what you base your conclusion here that it is not equal to the Sydney coal?—A. My evidence gives that. I base my conclusion upon the analysis made by the Professors of McGill University at Montreal at the request of the Dominion Government through the Department of Mines.

Q. Well, now, I have here the analysis on the statement which you made here. I have here also a statement from the Mines Department and I think it will be of interest to the Committee to just look at one or two or three of the items here. For instance, the moisture is an important element?—A. Very important.

Q. In determining the heating value of coal?—A. Very important.

Q. And this report of the analysis of the Mines Department puts moisture at 4.8. I find that you have a report from some other source. You say from McGill University?—A. No, pardon me. I say from the Department of Mines. That is what I said.

Q. You said it was the result of the findings of Professor So-and-so of McGill University.—A. I said, if you please—I distinctly stated that I took it from the reports made by the Department of Mines. They are the people who would be responsible for that report. They employed the Professors of McGill University.

Q. That is another way of putting it. We find ourselves at the same point.—A. I don't like being misquoted.

Q. I am not misquoting you.—A. Yes, you are.

Q. You read the report and you will find out. We better go at it coolly. This report of yours puts moisture at 9.5, and this report of the Mines Department sent to me this morning puts it at 4.8. Now moisture is a very important element. I can go over the whole sheet and I find that the two reports are as far apart as darkness and light, but the point I want to make particularly is this, these reports I have in my hand emanate from the department, one by McGill University Professors, the other by Mr. Stansfield, who give figures here of an analysis. They would not give us any idea in the world. One is diametrically opposed to the other. Here is one stating the moisture is 4.8 and the other is more than double that. I can go through the whole list here and I find there is a tremendous discrepancy between both reports. My conclusion from that is that this is not worth the paper it is written on, the information contained in these reports. That is reasonable, is it not?—A. I would not like to think that the report published by the Department of Mines is not worth the paper it is written on.

Q. Here is one report (exhibiting report to witness). That is 4.8. The other report is 9.5. Now, in view of these you drew your conclusions from these figures and you made a report here to the Committee that such coal could not be superior or equal to the other coal on account of certain data which you found here. Now I prove to you that this data is not reliable and you will agree with me the conclusions which you came to based on these figures cannot be the proper figures.—A. I don't

[Mr. Louis Simpson].

think it is fair to say that because there is a discrepancy in the analyses—the circumstance is rather peculiar. The man that made this actual analysis at McGill was called Stansfield. The man who made the other report from the Department of Mines is also called Stansfield. They happen to be two brothers. It is not for me to judge which one between those two is accurate or inaccurate. I simply compiled from a report that cost the Dominion Government a good deal of money and which has been accepted as being accurate up to now. It is not for me to decide which of these two brothers should be followed.

Q. This is the most recent report.—A. That makes no difference.

Q. There is a difference of 100 per cent in most of these items that are given here. As a layman, myself, I am absolutely unaware of what the conditions are. I don't know anything at all about it. There is one thing I have in view which I will come to in a minute or two. I would like you to assist me in protecting this beautiful field of coal in Western Cape Breton Island. I would solicit your assistance to help me out?—A. I am quite with you there, but you attack my part of it, which I don't think was right, because I was depending on the accuracy of the work done by a chemist.

Q. Absolutely correct.—A. Employed by the Government.

Q. I exonerate you from being the parent of any of these reports, but I cannot very well exonerate you from putting on the records here something that is going to be injurious to the important coal areas down here.

The CHAIRMAN: The report Mr. Simpson gave the other day is all in the Government publication, so he is simply repeating before the Committee what has already been given.

Mr. CHISHOLM: I am not finding fault at all.

The CHAIRMAN: We will have to prevent getting into a wrangle.

Mr. COWAN: The question is as to the reliability of the Departmental reports. In my opinion they are not reliable.

WITNESS: Mr. Chisholm, you ought to thank me for bringing this up before you.

Mr. CHISHOLM: I am delighted, yes.

WITNESS: For these reasons, if these reports are inaccurate the sooner we know it the better. I did not bring that up in order to injure the Nova Scotia coal fields. When I compiled this report I had my own personal doubts as to the accuracy of the moisture content, but it was not for me to bring that before you. I have simply placed it as I found it in the report and I have a right to object to it, only don't blame me; that is all.

Q. Within your experience are you able to say whether or not the moisture vanishes in proportion as you sink down?—A. No, I have no actual experience in coal mining. I think it is possible.

Q. With regard to the statement there, it is a fact that this coal—I am prepared to swear to that because I know—it is a fact that this coal for domestic purposes commands a price of \$2 more than any other Nova Scotia coal on the market in Halifax for domestic purposes, and mind you I emphasize that. Would you be prepared to say that it is possible that these reports, being inaccurate, the data put in your hands not being thoroughly reliable, it might be possible that the other day when you made your statement you were not absolutely correct?—A. No, I could not say that.

Q. That is the important point?—A. I was basing my argument upon these tables. If those are wrong, then my argument might, of course, be wrong.

Q. Another thing, I want to show the Chairman what I mean by this. According to the reference to our Committee our business here is to find out our future supply of coal. There are, I venture to say without exaggeration, over two billion tons of coal in that area. It would be a serious thing that evidence of this character should

[Mr. Louis Simpson].

go before the people of Ontario, for instance, to say that this coal is not as good as Sydney or Pictou coal. To a man who is taking as much interest in that constituency as possible it is natural that I should be interested in this question.

By Mr. Cowan:

Q. Is it not true that in all cases the Mines Department has undervalued the value of Canadian mines? Don't you generally find them running that way?

The CHAIRMAN: Now, we will deal with the subject of the development of our oil shales.

My Mr. McKenzie:

Q. We had evidence of all this about the coal in the West. Are we going to contradict it or duplicate these reports?

The CHAIRMAN: I think evidence along this line is not before the Committee. I think it would be better if Mr. Simpson would take up the question of the development of our oil shales and leave these matters in abeyance.

WITNESS: In order that I might place before the Committee the importance of oil shales I had to establish certain facts and it is part of my argument.

The CHAIRMAN: It is leading up to that.

WITNESS: Yes.

The CHAIRMAN: Very well, go on.

The following report was read and handed in:—

Mr. Chairman and gentlemen: I had the honour to appear before you on Friday, when I presented for your information a compilation, taken from certain reports published by the Department of Mines, wherein, in a condensed form, is given the data necessary for you to determine for yourself the heating value of some of the many different coal mines in Canada east of the Rockies.

Since then I have had the opportunity to examine the engineer's reports of certain large deposits of coal owned by the P. Burns Coal Mines, Ltd., and located to the south of Sheep river, in the province of Alberta. The coals, according to this report, are anthracite in character, but are not true anthracites. The best seams are reported as follows:—

	Mois- ture	Ash	Volatile Content	Fixed Carbon	Total Carbon	Sulphur	British Thermal Units
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	B.T.U.
Gillespie seam 7 ft. wide.	1.02	7.67	15.70	74.75	79.80	0.85	14,213
Sharp seam width not stated	1.12	6.77	13.84	77.79	.....	0.47	14,383
Gillespie seam 7 ft. wide..	1.15	7.80	15.94	74.30	78.58	0.81	14,178
Maloney seam 5 ft. wide..	1.15	7.42	15.59	75.05	80.12	0.79	14,240
Total (probably) 27 feet.							

Mr. John Blizzard, late of the Department of Mines, in his pamphlet on the "Economic Use of Coal," published by the department states: "The composition and heating value of coal varies very considerably." Mr. Blizzard gives the following as a partial analysis of anthracite, imported from U.S.A. and sold in Ottawa. Moisture 3.1 per cent, ash 14.3 per cent, B.T.U. 12,360.

If the analysis, given above, of the Sheep River coal, be correct, it is so much superior to the anthracite analyzed for Mr. Blizzard that, providing everything else, such as the physical properties of the coal, be right, no difficulty should be experienced, so far as quality is concerned, in finding a market for this coal in Manitoba and even in Ontario.

The coal of the seams mentioned is said to be "hard and firm." Such coals should be able to endure a long railway haul without excessive degradation. It is claimed that the total width of the workable seams is 428 feet, but the coal of many of these seams is reported as being "soft and croppy," others as being "croppy."

[Mr. Louis Simpson].

Six seams are stated as being "soft and cropy," whilst six are pronounced as being "cropy," some are described as being "firm" or "fairly firm." Only the coal with good physical condition could withstand the long haul to the east, without excessive degradation. In the Digest of Evidence taken before the Royal Commission on Fuels in Great Britain, Vol. 1, Page 304, it is stated that anthracite coal contains "88 per cent and upwards of Fixed Carbon." In Vol. 2, Page 19, of the same Digest the following analysis is given: Moisture 2.30 per cent, Volatile Matter 6.50 per cent, Fixed Carbon 86.52 per cent and Sulphur 0.70 per cent.

The International Encyclopedia, published in 1918, gives the following:—

	Mois- ture	Ash	Volatile · Fixed Matter Carbon		Carbon	Sulphur	B.T.U.
	Per cent	Per cent	Per cent	Per cent	Per cent	Per cent	
Peat, Orlando Fa, U.S.A.	13.10	5.68	56.83	24.30	51.18	0.49	.....
Lignite, Crockett, Texas, U.S.A.	13.40	14.85	42.75	29.00	52.06	1.04	9.358
Sub-bituminous, Lafayette Co., Colo.	13.49	6.37	37.11	43.03	61.13	0.58	10.771
Bituminous, Johnston, Pa. . . .	2.35	11.95	14.30	71.40	75.16	3.30	13.228
Semi-bituminous, Coal Hill, Ark.	1.28	12.21	12.82	73.69	77.29	2.01	13.406
Semi-anthracite, Russellville, Ark.	2.07	9.30	9.81	78.82	80.28	1.74	13.703
Anthracite, Schuylkill Co., Pa. .	2.80	7.83	1.16	88.21	88.36	0.89	13.298

The Sheep River coals might be termed semi-anthracites. The best seams show very high grade coal. What quantity there may be of this high grade coal it is not possible for me to estimate. Nothing seems to have been done to prove to what depth the several seams persist. At to-day's prices, it may be commercially possible, if the quantity of coal contained in the seams mentioned as containing hard and firm coal warrant the expenditure required to make the coal available, to mine this coal and sell it in the province of Ontario in competition with U. S. A. anthracite.

The question under investigation by your Committee is of a character so complex that it is difficult to keep in mind that the local conditions present in the several sections of Canada are often widely different and that, without a full knowledge of such local conditions, no worth-while decision can be arrived at. Coal used for domestic purposes has to be considered separately from that used for the production of light, heat and power by large producers. It is even necessary in some cases to consider separately domestic coal so called, used for heating purposes, apart from the coal used in the kitchen stove. The local conditions of the East and West must be correctly understood.

You have had before you representatives of several of the many interests connected with mining and transportation of coal, also of dealers in coal, but as yet none representing the large consumers. With your permission before I proceed to discuss the question of coal substitutes I desire to give evidence that will, I think, remove some misunderstandings. It may, I advance, be now admitted that under present conditions the Nova Scotia coal cannot be economically marketed west of Montreal, nor can the soft domestic coal of Western Canada be economically marketed east of the Great Lakes. Mr. Wolvin, President of the British Empire Steel Corporation, which company own the chief coal producing mines of Nova Scotia, page 149 of the record, gives evidence that "he thought it was almost hopeless" to "get into the real Ontario market." Mr. H. A. Harrington, late Fuel Controller for the Province of Ontario, states page 266 of the record "The long hauls between Canadian mines and Ontario's industrial centre leaves no room for argument from economic standpoint, when compared with the short haul from United States mines. To patronize home mines means payment of higher prices at the mines, higher freight rates, and greatly increased difficulties in securing coal when most required, viz., in the winter season." I desire to be placed on record as endorsing both these statements. To-day's average cost of mining, and delivering to cars or on wharf, coal in Nova Scotia may safely be taken as being \$6 per ton, whilst the cost in Alberta is

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\$5 per ton delivered on cars. Mr. Wolvin, Page 140 of the record, states that the cost during last March was \$7.53, but, owing to reduced output, this cost was certainly unusually augmented. The cost of soft coal of railway quality in the States appears to be, see page 57 of the Record, from \$2.25 to \$3 per ton, and on the same page it is stated that the average profit taken is 25 cents per ton, making the actual cost of mining and delivering on the cars \$2 to \$2.75 per ton.

The comparative price of coals mined in Nova Scotia to that mined in the United States and delivered by water in Montreal would seem to be as follows: Nova Scotia coal, pages 132 of the record, \$8.10 cars Montreal, whilst United States coal purchased at \$2.25 to \$3 (see page 57) would be:—

Cost at mine.. . . .	\$2 25	\$3 00
Freight to Erie.. . . .	1 95	1 95
	<hr/>	<hr/>
	\$4 20	\$4 95
13 per cent cost of exchange.. . . .	0 54 $\frac{9}{10}$	0 64 $\frac{7}{20}$
	<hr/>	<hr/>
Totals.. . . .	\$4 74	\$5 59
	<hr/>	<hr/>
Freight to Montreal.. . . .	\$2 25	\$2 25
Duty.. . . .	0 53	0 53
Unload steamers and boarding cars	0 40	0 40
Insurance.. . . .	0 05	0 05
	<hr/>	<hr/>
Grand total.. . . .	\$8 07	\$8 82

It is therefore evident that the Empire Steel Corporation when offering their coal at \$8.10, f.o.b. cars Montreal, are taking full advantage of the duty, 53 cents, and of the protection given them by the condition of the exchange market, say 55 cents, or a total of \$1.08 per ton. It is not unreasonable to believe that the price \$8.10 f.o.b. cars Montreal was not quoted as being the cost price of the coal, as mined and delivered, plus a fixed profit (a profit that may or may not be reasonable).

Mr. Dick in his evidence admitted that he fixed the price asked for coal at all the business would bear.

It is worthy of note that the protection afforded, by duty and through the loss in exchange, to Canadian producers of coal, against the cost of producing coal in the States appears to be \$1.08 on \$2.25, or nearly 50 per cent.

Seeing that at Montreal the price asked for Nova Scotia coal is higher than the lowest price at which United States coal can be delivered at Montreal under similar conditions of delivery, it is evident that it is not economically possible for Nova Scotia coal to be delivered west of Montreal, unless the coal operators are prepared to admit that they have been asking Montreal consumers an excessive profit.

West of Montreal freight conditions are different and become even more complex. To ship by water Nova Scotia coal to Valleyfield, the furthest west large soft coal-consuming centre in the province of Quebec on the St. Lawrence, entails a further charge of \$1.32 per ton, which added to the \$8.10 asked by the Sydney coal operators would increase the cost to \$9.42. By the time the coal was unloaded at Valleyfield run-of-mine quality (through degradation) would have become "slack," and slack from United States mines can be laid down at Valleyfield by cars at \$8.66. Buying coal delivered "all rail" has the advantage that large stocks of coal have not to be carried through the winter and paid for long before the fuel is required.

Proceeding west, whilst the cost of the Nova Scotia coal may not be in some cases greatly augmented, that of the United States coal will be reduced, until the cost delivered would become less than \$8.

Nor must it be forgotten that whenever exchange becomes normal, this cost in that case could be further reduced 50 cents to \$1 per ton. I would urge upon this Committee the importance of ascertaining the rate per ton per mile that should, in all cases, be charged in Canada for freighting coal on the railways in carload lots. There would appear to be a lack of accurate knowledge upon this most important

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point. From the point of view of a large consumer of soft coal, the advantages of being able to receive the soft coal requirements, week by week, as they may be desired, keeping in stock only a moderate supply of coal to guard against delays due to snow storms, etc., instead of having to accumulate, during the summer six months, coal sufficient to last for the next six months, cannot be ignored. Not only is the loss of interest on the money investment considerable, but at times, and always in some cases, the money required to be locked up may not be available. Six months' requirements at \$8 per ton may amount to a considerable sum. Surely it is evident that Nova Scotia coal will have to be landed in Montreal, and in places west of Montreal, in order to win and retain those markets, at prices, not only as low as the prices United States coal can be laid down at, but at prices lower, so as to make up for the extra indirect costs accompanying the use of Nova Scotia coals during the winter season.

Users of coal are supposed to know their business; they carefully estimate the advantages and the disadvantages resultant from the use of one coal over the use of another, and they place their contracts where their advantage lies. The user of certain coal will hesitate and generally refuse to change over to another coal, unless distinct advantages are apparent to warrant the assumption of risks that are present in all changes.

Certain members of this Committee would appear to think that the user of coal should be patriotic and should give preference to Nova Scotia coal.

No doubt buyers, when having to make a change, would do so, but no wise manufacturer is warranted to make any change, unless he has good substantial reasons for so doing.

There are more sides to this question than are known to the general public. For instance, it is advanced in some quarters that it is not to the advantage of Canada that the coal fields and especially that portion that can be inexpensively mined of Nova Scotia coal fields should be quickly exhausted. That it is not good business to encourage the extension of submarine mining until the land deposits are nearing exhaustion. Mr. Wolvin has admitted that mining, under submarine conditions, costs more than does mining on land—further, he admits, that the costs grow as the distance under the sea is increased.

Consumers are therefore aware that any increase in the Nova Scotia output, under the present system of operations, means the certain future increase in costs and in the price the user will be called upon to pay.

Others believe that all coal of metallurgical quality should be reserved for future metallurgical use and should not be sold for fuel purposes.

Hence, as a matter of state policy, there are users who believe that it is to the interest of Canada that the Nova Scotia coal operators should not be encouraged to increase their present output facilities, but rather that the energies of the operators should be confined to securing constant and full output from their present operated mines. Those holding these opinions object to being penalized for the purpose of encouraging the coal operators of Nova Scotia in doing for their own advantage, what they considered to be contrary to Canada's best interests.

Many users of coal feel that they should not be called upon to expend their money for the support of the coal operators or even of the coal workers, etc., of Nova Scotia, unless they, the users, are first satisfied that the coal is being mined, transported and delivered at an irreducible cost. The history of the coal operations in Nova Scotia has in the past not been of a character to win the confidence of coal users.

Nor have they now reason to believe that the Nova Scotia coal has been or is being mined at a minimum cost.

It is evident from the evidence given before your Committee that the minimum cost can only be secured when all parties including the Dominion Government, the

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provincial Government, the mine operators, the transportation companies, and the mine workers work together to secure this much-to-be-desired result; which can only be obtained, first, by the mine workers working steadily, full time without unnecessary lay-offs. By their being content with a reasonable remuneration for work done, taking also into consideration the great advantage they receive through being able to purchase the fuel they require for domestic use at greatly reduced prices.

Second, by the mines at present operating being equipped with the most economically operating machinery, which the operators should be able to purchase at the lowest possible cost. Third, by competent management, the remuneration of which is reasonable. It will be asked wherein can the Dominion and provincial Governments and the other bodies named halve this good work.

The Dominion Government can permit the free importation of all machinery and equipment required in mining. It may be objected that such a privilege would injure some established firms of machinery builders. The objection is more apparent than real. Any injuries suffered by the one or two concerns affected would be more than made up by increased business in other directions. Generally speaking, a large portion of the machinery sold by these concerns is not manufactured in Canada, but is manufactured in the States.

The Dominion Government can arrange that the Government departments place long term contracts for coal and that the terms of such contracts as to delivery shall be faithfully carried out. That the coal, delivered, shall be paid for by the Government on the same terms as is required from the other users of coal. On page 131 of the record it is stated in evidence that out of a contract of 300,000 tons the National Railways had only accepted delivery for 110,000 tons, leaving 190,000 undelivered and that 170,000 tons had been "banked" in consequence. At \$6 per ton the banked coal represents a value of \$1,042,000, a sum so considerable that it is not wonderful that the mines operators had to place the mines on short time. Moreover the cost of banking this coal and of reloading it on the cars must be considerable. The cost is not stated, but it may, without including interest, exceed \$30,000, which sum of money someone has to make good.

It is probably impossible to do without some "banking," that is if the mines have to be kept in constant full operation, especially during the months of January, February and March. It is a matter for consideration whether it would not be to the advantage of the mine workers, if they were to agree to work during those months at reduced rates of wages, providing they are guaranteed full working hours. The question of payment as made by the several Governments, Dominion and Provincial, is also a matter of great importance. It is the custom of the trade that goods shall be paid for by cash in 10, 14 or 30 days; the Government should pay on like terms. If payment be delayed the Government's creditors may have to borrow money. To borrow money in these times is costly. Why should any Government, that can borrow money at a less cost than any industrial concern, delay paying its obligations and thus compel those from whom they buy property or goods to borrow money at a higher cost. It would be instructive to know on what terms as to payments the Nova Scotia operators sell their coal to the Government, and whether those terms are strictly observed, and if they are not strictly observed, why they are not and who is to blame.

The Government can also further help the good work by compelling the operating companies to make sufficient and proper provision for depreciation, and by preventing operators using, in place of a depreciation account, a surplus account which financial manipulators eventually use as an excuse for issuing more share capital, claiming that the surplus account represents assets.

The Provincial Government can help.

1. By agreeing not to increase the rate of royalties now being paid.

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2. By settling for all time certain disputes as to the ownership of certain lands and of certain of the contents of such lands. For instance as to the ownership of the oil yielding shales of Nova Scotia.

The transportation companies (including those operated by the Government), can help:—

1. By placing term contracts for coal.
2. By revising their tariff as to the transportation of coal, where owing to small traffic in the past, the old tariffs have never been overhauled.

The mine workers can help:—

1. By keeping the output of coal mines at the maximum. This includes the cessation of strikes.
2. By being willing to work during January, February and March of each year at a reduced rate of wages, providing they are guaranteed full working time.

The mine operator of Nova Scotia, to-day, has opportunities of business that did not exist before this war. The European coal situation is such that it should be possible to secure a profitable export trade, which would not only find work for the steamers employed in the home waters during the summer and autumn, but which would also reduce the quantity of coal, that, otherwise in order to keep in full operation during the months of January, February and March, would have to be "banked." Banking coal not only costs money but also causes degradation. Nor must the operator forget that the policy of making a market pay the "highest price it will bear" without breaking, is a very delicate and dangerous operation—one that is bound to generate more or less ill will, even when directed by the cleverest sales agent.

Before operators can expect consumers to bear any part, however small, of the operator's burdens, on the plea that it would be to Canada's benefit, the operators and the other parties mentioned, must first show that they have done everything within their power to mine and deliver coal at the lowest price possible.

Having thus represented to you an aspect of the fuel question as seen by the average consumer of coal, it gives me great pleasure to inform you concerning certain substitutes that can be used in place of coal, to produce light, heat and power.

These substitutes comprise the use of hydraulic and hydro-electric power plants, natural gas, hydro-carbon, oils and peat.

The provinces of Quebec and Ontario are supplied with many developed hydraulic and hydro-electric power plants, still there are many large power propositions yet to be developed.

A certain writer upon coal has presumed that coal was an absolute necessity for the industrial prosperity of a country, but a country that possesses a sufficiency of well-distributed, cheaply developable hydro-electric power and especially if this is supplemented by a home supply of hydro-carbon oil, obtained either from oil wells or from the reduction of oil yielding shales can do without coal. Under the conditions stated, coal is not necessary. Coal, in the past, has been a very useful servant to man. A servant that man has used to but small advantage as compared to what might have been, but it is a fact that light, heat and power can be better and more economically produced by the combustion of natural gas, by the combustion of hydro-carbon oils, or by the use of electricity generated by hydraulic power, where such hydraulic power is locally available. As to their relative cost, everything depends upon the local conditions. Hydraulic and hydro-electric power possess however the one supreme advantage, viz., the use of the power does not cause the future supply to be lessened or exhausted. No other at present commercial source of power possesses this advantage. It, however, possesses the disadvantage that the power can only be economically produced when the whole available power is used. That is, the cost of the total power used is as much, when only a part of the power is used, as when the whole of the power is used. Hydro-electric power is very economical for a twenty-four-hour-per-day power, especially when generated and used in

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large units, but when the power used is variable in quantity and in duration of time used, to make the total power development economical, it is often necessary that the peaks of the total load should be provided for otherwise. This can be done most economically by the use of power, produced by the combustion of natural gas, or of hydro-carbon oils, if such be available. As the future of the supply in Eastern Canada of natural gas is not encouraging, the sole alternative is hydro-carbon oils, of which more later.

Because the cost of hydro-electric power consists chiefly of the interest and depreciation of capital cost, it is evident that to secure low price hydro-electric power, it is necessary to have low-priced capital expenditure. Herein the Dominion Government can give great help. The large machines now used for hydro-electric power development are usually made in the States and are imported into Canada, even when purchased through Canadian firms who are the builders of the smaller electrical units. Machines so imported cost the purchaser about 30 per cent over and above United States prices. Were the Government to rule that all the material and machinery required in and for the development of new hydro-electric developments be admitted into Canada duty free, a distinct advance in power production will ensue. Such an arrangement would not cause the Government to lose any revenue. No one can be said to lose by giving up that which they have no chance of obtaining. Nor would the electrical machinery industry of Canada suffer loss—on the other hand, business would be advanced—because there would be a large increase in the demand for the machinery they now build, the increase being the natural consequence of the initial increased power development.

The same applies to the nascent industry known as the oil shale industry. In all quarters of the world, in every province of the Dominion of Canada, excepting perhaps the province of Prince Edward Island, there has been found shales, which when subjected to the influence of heat give off hydro-carbon gases. These, when condensed, become crude hydro-carbon oils. In some parts of the world, notably in certain parts of the United States, these shales have been found covering large territories. In Canada, large deposits are known to exist in the provinces of Nova Scotia, New Brunswick and Quebec, some of which contain shales which give a high yield of oil. Extensive deposits of "lean" shale are known to exist in the province of Ontario. In the provinces of Manitoba and Saskatchewan it is suspicioned that very considerable deposits will shortly be proven, whilst I am strongly of opinion that large deposits will be found in Alberta. Deposits are known to exist in British Columbia.

The oil shales of Scotland have been retorted for about seventy years. The oil obtained in Scotland was quite a factor in the late war. As Canadian shales are usually "lean," it has been necessary to devise a plant that could retort the shales at a relatively small cost as to capital expenditure. Such a plant I have, with the constant work of the last eight years, planned. A description of this plant is given in a reprint of an article written by me, by request, for a New York technical journal. A copy of which is placed at the disposal of each member of the Committee. Samples of New Brunswick, Quebec and other shales are also on exhibition.

By the process described the gasolene, kerosene, and the lubricating oil fractions are removed from the oil obtained from the shale, the balance being a very high grade fuel oil. This oil can be used for raising steam by being burned under any steam boiler, or for the direct generation of power in an internal combustion engine, and it can be used for the heating of furnaces and stoves.

For the latter purpose, it is right to state that the burners that have been hitherto used for the purpose have not been entirely satisfactory, but they are so nearly so, that given the encouragement of an assured constant supply of such a grade of oil as that mentioned, I anticipate that it will not be long before perfected burners are produced. Fuel oil of the grades above mentioned is the most economical fuel for use on steam dredges, steamers and on motor vessels.

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A reprint of an article written by the speaker on "Light, heat and power" for the Canadian Chemical Journal, is at the disposal of the members of the Committee. This article explains the advantages of oil fuel.

To establish the oil shale industries in the several provinces of Canada, it is absolutely necessary that the machinery and material required for the consumption of the works and for the mines should be admitted into Canada without the payment of duty. Upon the cost of this plant is dependent the quality of the shale that can be commercially reported, and as Canada's deposits are chiefly shale of low grade, the importance of low cost construction is evident. For Ontario, the fuel situation would be solved were the hydraulic powers of the province to be harnessed, and the power generated used upon certain of the railroads. As the Committee is to hear from Mr. Murphy on this point, I will not occupy the Committee's time further than to state that providing the cost of electrically equipping the railways is reduced to a minimum this would appear to me to be a very feasible part solution. The railway equipment displaced by the new equipment can be used upon such other portions of the railway system operated in the old way.

The carbonization of coal to produce a smokeless fuel, in the form of a modified coke, is quite feasible, but affords no solution for Ontario as to the importation of coal from the United States. The machinery required is also very expensive and would have to be imported. Should such a solution commend itself to the Committee, I would suggest that the Committee's recommendations be accompanied with a rider asking for the free admission of the required machinery. Such coke would only be used for domestic heating. Should the semi-anthracite of Alberta prove, on development, to be a satisfactory domestic fuel, it would appear to me that this might be the best ultimate solution for the province of Ontario's domestic fuel problem—leaving to hydro-electric power and fuel oil the solving of the problem of supplying fuel for industrial operations.

As to peat fuel, the peculiar conditions existing in Canada can only make the production of peat fuel of local interest, unless it is found that the system of carbonization, mentioned by Mr. Harrington, of which unfortunately I have no cognizance, is found, on examination, to be economical.

WITNESS: Mr. Chairman, I purposely did not enlarge on the methods of recovering the oil from oil shales, because I thought that probably the members would sooner, at their leisure, read what I have already written, and that if they desire me to come back and answer any question on that point, I am entirely at their service.

By Mr. Keefer:

Q. As far as recovering oil from oil shales is concerned, have we any plants in Canada?—A. Yes, we have an experimental plant at Baltimore, in New Brunswick.

Q. Prior to the discovery of oil at Petrolia, they made no attempt to do that?—

A. Oil shales were reported in Collingwood, and also at Baltimore, years ago, before the flowing oils were found.

Q. The quantity in the Maritime Provinces is very large?—A. Yes.

Q. And also in British Columbia?—A. I have heard of some, but I have not been out there.

Q. Did you take into consideration the by-products such as sulphate of ammonia?—A. Yes.

Q. You included that?—A. Yes.

Q. For fertilizing purposes?—A. Yes.

Q. How did you find the cost of the oil when taking the value of their by-products into account, according to your system?—A. It depends very largely, Mr. Keefer, on the cost of mining. Now, there are some shales that can be mined by the use of a shovel, and of course, they can be mined very cheaply. Other shales you have to follow down to great depths, so the cost of mining may run from 50 cents a ton up to two dollars.

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Q. That would be a big factor, I suppose, in Scotland, near Glasgow—but only very recently—why the shales are particularly mined for oil—the big factor would be because they have no oil? If they had oil like we have here, would they do it?—A. We have not very large oil-fields in Canada.

Q. They have at Petrolia?—A. Yes, but it is not one one-thousandth part of Canada's requirements.

Q. When it was first discovered, it was greater than Canada's requirements, but since then Canada has grown?—A. Yes.

Q. Is there any economical reason why capital cannot tackle that oil shale industry in Nova Scotia?—A. The difficulty has been the demand of the Dominion Government that all machinery brought in should pay duty. Capitalists of the States and others, have taken the position, saying "We are not prepared to bring our good money into Canada to start a new industry for Canada's benefit, and let the same be penalized to the extent of thirty per cent."

Q. Let us see how that works out in the States. Are there any oil shales in the States?—A. Yes, work in that line has been commenced there.

Q. But the duty question has not come into that there; it has not been brought up in the States?—A. It was not that, but until lately they had a great many flowing wells; they had all the oil they wanted up to a few years ago.

Q. Whereabouts are the shales in the States?—A. I have examined shales in Kentucky, and there is a very large territory in Colorado and Utah, and I think in about one-third of the States of the Union they are finding shales now.

By Mr. Chisholm:

Q. Where are the shales located in Nova Scotia, Mr. Simpson?—A. In Albert county and in Westmoreland county.

Q. That is in New Brunswick?—A. I beg your pardon. There are shales in Antigonish, and there are shales in the county to the south of that.

Q. Guysborough?—A. Yes, and there are three or four counties where there are shales found, and I think there are some being found up in Cape Breton, but those shales are more carboniferous than hydro-carbon.

Q. Your opinion is that if machinery were allowed to come in free of duty, there might be development?—A. I am certain of it.

By Mr. Cowan:

Q. Do you think these Americans are coming into Canada to assist the Canadians to make a profit?—A. They are coming in to make a profit.

By Mr. Keefer:

Q. You stated that the large machines are not manufactured in Canada for hydro-electric purposes, and therefore ought to be imported free of duty. Is that statement absolutely correct?—A. I have the information from men in the business.

Q. What do you call large machines?—A. The big generators.

Q. Have you ever been in Niagara Falls?—A. Yes.

Q. Have you ever been through the plant there?—A. Yes.

Q. Seen the machinery made by the Canada General Electric?—A. I want to explain that. I planned and built the first hydro-electric power house built in Canada—

Q. Will you answer my question?—A. I will answer your question—

Q. The question is have you seen the machines made by the Canadian General Electric?—A. Yes.

Q. They are in operation?—A. Yes.

Q. Alongside the Swedish machines?—A. Yes.

Q. Alongside the Americans?—A. Yes.

Q. They are successful?—A. Yes.

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Q. Then why make that statement?—A. Let me explain. I was in that power house. When it was first built, there were put in four generators; the first one bore the name of the Canadian General Electric, but it was made in Schenectady. I know, because I paid for it, and I know that until there is likely to be a demand in Canada for these big machines they are all made in Schenectady, but come into Canada through the Canadian house.

Q. Do you know what machines are being used up in the Nipigon territory?—A. No; I have not been there.

By Mr. Maharg:

Q. Are all these machines bearing the Canadian name being made in Schenectady?—A. No, I do not say all, but if you want to buy a machine and write to Shenectady to the General Electric, they refer you to the General Electric in Canada, who take the order, and it may either be made in Schenectady or made in Canada and still bear the Canadian name.

The CHAIRMAN: Perhaps you had better confine your future questions to the oil shale, so as to avoid confusion.

Mr. CHISHOLM: I understood this was in connection with oil shales.

Mr. MAHARG: It is all in connection with the fuel supply.

The CHAIRMAN: Yes, but there is bound to be a difference of opinion in regard to the manufacturing of this machinery.

By Mr. Keefer:

Q. You say the cost of mining shales has gone up as high as two dollars. Is two dollars a prohibitive price for extracting oil?—A. Not when the shale is rich in oil, but it would be if the shale were lean in oil.

Q. Where does the dividing line come in, between the shale for which two dollars would be prohibitive and that for which it would not?—A. That is a pretty difficult thing for me to answer.

Q. That is not difficult if you know the cost of the extraction of oil. As you say that depends on the cost of the mining of the shales. Supposing you had your shales mined for nothing; you would know the cost of the extraction—what that cost would be; if you had your shale mined gratis?—A. Well, hardly, because of this reason: if you have a shale that is lean the size of your condensers will be very much less than it will be if the shales are rich, so the cost of your work has to be worked out upon the basis of the yield from the shales.

Q. Do we manufacture here in Canada any paraffin usually manufactured from shale?—A. No; Canadian refineries use shale oil.

Q. But the ordinary oil refineries: do they use paraffin, or is it extracted from the oil shales? I have seen wax candles—A. No.

Q. Does the shale oil produce paraffin?—A. Yes.

Q. Those around Glasgow do, and all through Scotland.—A. The shale oil may have a paraffin base, or an asphaltum base, or a base mixed between the two.

Q. Does the Nova Scotia shale oil have a paraffin base?—A. Yes, some of them do.

Q. So it would be desirable to have that investigated?—A. Certainly, most desirable.

By Mr. Cowan:

Q. Supposing a company were going into the development of a shale mine: About what money would they have to invest in machinery?—A. I am in negotiations now with a crowd of capitalists, and the capital they are required to underwrite is two million dollars.

Q. Would that be for machinery?—A. Yes, all for machinery and plant.

Q. What I wanted to find out was the amount that would have to be invested.—

A. I give you a concrete case; they are asked to underwrite two million dollars.

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By Mr. Keefer:

Q. What portion of that machinery is made in Canada?—A. I cannot tell you just now, because I am endeavouring as far as I can to get the machinery made in Canada, and gradually with a great deal of effort on my part, which I am giving for the good of the country, I am getting first one man and then another to agree to make, but it was hard work.

By Mr. Cowan:

Q. Is there any duty on that class of machinery made in the United States?—A. There would not be duty on machinery made in the United States if used in the States.

Q. If there was a duty going into the United States, and it is made there—the profits would be just as high?—A. I can get machinery made cheaper in the States than I can in Canada.

By Mr. Keefer:

Q. Special machinery designed specially for oil shale?—A. Yes, I am getting prices for machinery now both from Canada and the United States.

Q. Will you explain this, Mr. Simpson; supposing as you say, there has been no extraction of oil from the shale in the United States, and it is only beginning in Canada, what is your argument about the demands for this particular kind of machinery?—A. I do not quite catch you.

Q. There has been no extraction of oil from the shale in the United States, and it is just beginning now in Canada, and you say the machinery has to be specially designed for this particular purpose—where have they been selling it?—A. If I go to a maker in the States and I ask him for a price and he gives me a price, and I give him an order, to bring that machinery into Canada, I have to pay duty, but if a Canadian firm asked me a price that is higher than the price in the States, plus the duty and exchange, then I know where I am at, and that is where I am at.

THE CHAIRMAN: Any further questions to ask the Witness?

By Mr. McKenzie:

Q. Just one moment. I notice, Mr. Simpson, you are particularly severe on the methods of coal mining in Nova Scotia. What do you know about them?—A. Only what the user—the buyer—

Q. That is not what I am asking. I am asking about the operations and methods of mining, and the way they operate their mines. I notice you condemn it very severely. What do you know about it?—A. I beg to differ from you. I do not make any strictures upon their methods of mining down there. You cannot find where I made any strictures on their methods of mining.

Q. Well, finish.—A. I have finished.

Q. Your evidence will show?—A. Yes.

Q. What do you know about the difference in mining in land areas and in sea areas?—A. Only the difference Mr. Wolvin himself stated. I took it from his own evidence.

Q. You know nothing about it yourself?—A. I am not a coal mining engineer.

Q. You don't know when you get under ground whether you are in a sea area or a land area?—A. I think I would know that.

Q. You have never been in a mine?—A. Not in a Nova Scotia mine, no.

Q. You know nothing whatever about their operations?—A. Yes, I know something about their operations.

Q. Only from Mr. Wolvin's evidence?—A. And more than that, from the information I have from those who are engaged in coal mining in Nova Scotia.

Q. You are swearing to second-hand information?—A. I am not swearing to second-hand information at all, pardon me. You read what I said. I quoted Mr. Wolvin.

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Q. Life is too short to read what you said. You know nothing whatever about coal mining in Nova Scotia.—A. That is not a fair way of putting it and I object to it very much.

Q. That is all you know about the formation of coal, how it runs, and how it is taken out. You don't know anything about it.—A. I have before me all the Government reports and I have the information of people who worked down there.

Q. Were you asked to come here with a compilation of these matters?—A. I don't know that I was specially, but I thought it would be of interest.

Q. Answer my question. Were you specially asked to come here with those compilations?—A. I told you I did not know I was, but I thought it was of special interest to the country that those facts should be known.

Q. And this is a gratuitous surplusage you have been giving?—A. There is no charge for it. It does not cost you a cent.

Q. It takes up time?—A. It takes a good deal of time, yes.

Q. Do you know anything about the transportation of coal?—A. I think I know something about the transportation of coal, yes.

Q. What do you know about it?—A. I know what it costs.

Q. Did you ever take any particular charge of transportation of coal, say, from Sydney to Montreal?—A. I have had to arrange for the transportation of coal from Montreal to where it was used.

Q. On what authority do you base the statement that before you get to Valleyfield with Nova Scotia coal it would be all slack?—A. From my own experience.

Q. How was it brought up?—A. By barge. You see—

Q. You mean to tell me that it was coal that was taken from Nova Scotia by barge?—A. I am telling you facts and I don't like to be spoken to as if I were a witness in a criminal case, I will tell you that straight—I won't have it either.

Q. I am through with you. It is a waste of time. I want it in the record that we wasted a lot of time.—A. I want to explain that we used to buy coal at Nova Scotia, which was transhipped at Montreal into barges, and the barges taken up the canals and then it had to be unloaded from the barges into a pile and from the pile it was taken to the boiler-house, and by the time it went to the boiler-house it was just about slack.

Q. We have good coal in Nova Scotia, and I did not want any cheap shoddy like you have been trying to produce.—A. I have admitted you have good coal in Nova Scotia.

By Mr. Keefer:

Q. Breaking of coal in bulk and double handling increases the cost?—A. Certainly.

Q. If the same vessel came through to Ontario, have you estimated the saving in expense by water freight?—A. No, I have not.

Q. It would be a saving of \$1.50 a ton?—A. I have been spoken to very unpleasantly for speaking about something about which I have no knowledge.

Q. You are fully aware of the fact that it is quite apparent that breaking in bulk degrades the coal. It is a very serious factor?—A. Yes.

Q. That degrading of coal, did you say to what extent the value of the coal is decreased by reason of that fact? I would like to know the loss in the coal?—A. It depends a great deal on how your boilers are arranged. If your boiler is arranged with a modern stoker the loss is not as great as it used to be when it was hand fired. It is a very difficult question. I want to be absolutely fair in anything I say.

Q. Anybody can see that two or three times handling the coal will break it up?

Mr. COWAN: I don't suppose it will affect the Nova Scotia coal any more than any other coal.

[Mr. Louis Simpson].

Mr. MAHARG: I am going to differ slightly with my friend Mr. McKenzie, as to the value of the information we got this morning. This is the first gentleman that appeared before us who gave information as regards the consumer; I think he has given valuable information in that respect. I think while he has not given information respecting the value of the Nova Scotia coal, I think he has given very valuable information and I think the coal miners of Nova Scotia need jacking up.

Mr. KEEFER: They need jacking down.

Mr. MAHARG: The witness has taken a general view of the whole situation; he has taken the consumer, the producer and all into consideration. I think we should extend the utmost courtesy to all witnesses who take that view of the situation. That is all I have to say.

WITNESS: I want it particularly understood that I have no desire to depreciate the quality or the value of Nova Scotia coal. What I have tabulated shows that much of the Nova Scotia coal is very high in quality.

The CHAIRMAN: We thank you for your attendance. We have no other witness this morning. To-morrow we expect to have Mr. Alfred Rogers of Toronto, and Mr. L. E. Drummond of Edmonton, who is coming to give his evidence on the fuel problem from the point of view of the Canadian industry.

Mr. KEEFER: When are we going to take up the Hydro Electric phase of this?

The CHAIRMAN: As soon as we can reach it, Mr. Keefer.

Mr. KEEFER: I suppose in the first place, as Mr. Murphy's name was mentioned, we should call him as early as possible because he has spent a great deal of time on this question. He is one of our million dollar officials.

The CHAIRMAN: I might say we have to take up the question of transportation, and next week we can conclude transportation and take up the substitutes for coal. Anything further before the Committee?

The Committee adjourned until 10.30 a.m., Tuesday, May 3.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

TUESDAY, May 3, 1921

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: If the Committee will please come to order, I think we had better commence our proceedings. I have some communications here, I would like to read into the record.

VICTORIA, April 26, 1921.

M. STEELE, M.P.,

Ottawa.

DEAR SIR,—On behalf of Premier Oliver, who has left for the East, I thank you for information *re* fuel Committee contained in yours of the 20th instant.

I have the honour to be, sir,

Your obedient servant,

(Sgd) J. MORTON,

Secretary.

I have another letter here, from the office of the Premier of Manitoba, as follows:

WINNIPEG, MANITOBA, April 28, 1921.

M. STEELE, Esq., M.L.A.,

House of Commons, Ottawa, Canada.

DEAR MR. STEELE,—Permit me to acknowledge yours of April 8th *re* the Special Committee of the House of Commons to enquire into all matters pertaining to the future fuel supply of Canada. Within the last few days, the requirements of the West have been presented to the Railway Board, which will probably satisfy for the moment. I will, however, take up the matter of representations being made to your Committee.

Yours faithfully,

T. C. MORRIS.

I also have a telegram from Mr. R. M. Young, who appeared before the Committee at an earlier stage of our proceedings. It is as follows:

CALGARY, ALTA., May 2, 1921.

Mr. M. STEELE, Chairman,

Parliamentary Fuel Committee,

Government Buildings, Ottawa, Ont.

Referring to evidence given before your Committee regarding Alberta coal industry, this Association would, on behalf of its Alberta members, appreciate your making it a matter of record that it is strongly opposed to any reduction in the tariff on incoming coal from the United States. Alberta production has fallen off considerably as compared with corresponding period last year, and any measure adversely affecting the competitive status would have serious effects on ability of Alberta to hold its markets.

(Sgd.) WESTERN CANADA COAL OPERATORS' ASSOCIATION.

Per R. M. YOUNG.

Now, we have with us this morning, Mr. Alfred Rogers of Toronto, and I will ask the Committee to listen to him.

ALFRED ROGERS, called sworn and examined.

By the Chairman:

Q. What is your connection with the coal trade, Mr. Rogers?—A. We are in the retail business in Toronto.

Q. What is the name of your firm?—A. Elias Rogers and Company.

Q. What position do you hold in the company?—A. I am President and General Manager of it.

Q. How long have you been in the coal trade?—A. About twenty-seven years.

Q. Always in the retail trade?—A. Yes.

Q. Now, Mr. Rogers, one matter in which the Committee is somewhat concerned is the increased cost of coal during recent years. Can you give us some information about that?—A. That is, you wish to get the costs to us at the border and the increased costs in handling in our locality?

Q. Yes, especially the cost to the dealer from the sources of supply.—A. I cannot go back as far as you asked me to, but I have from April, 1915. Shall I take the prices at Toronto, or at the bridge?

Q. Can you give us both?

Mr. COWAN: Would it be possible to give it to us at the mines? If so, we would rather have it.

By the Chairman:

Q. Can you give it to us from the Mines?—A. In April—by Jove, I have not got it. All you have to do is to deduct two dollars.

By Mr. Cowan:

Q. That is, freight?—A. Yes, the freight was two dollars. It is higher now. The price at the bridge was five dollars in April.

By the Chairman:

Q. What year?—A. 1915. The highest point in 1920 was \$10.30, that was in November of last year.

By Mr. Cowan:

Q. What was the freight rate that would have to be deducted from that—so as to get the mine cost?—A. I am afraid I have not got that. I thought I had. Have you not got the freight from the mines to the bridge?

Mr. MAHARG: We have it on bituminous coal.

By the Chairman:

Q. I thought perhaps you had it in your table.—A. No, I only came from the bridge—I thought that was all that would be required.

Q. Give us what you have?—A. You would not wish that by years, would you? The increase as it goes up each year?

Q. Yes, if you have it.—A. April, 1915, five dollars; 1916,—these are all for the month of April—five dollars and forty cents; 1917, five dollars and thirty-six cents; 1918, six dollars and twenty-five cents; 1919, seven dollars and eighty-five cents; 1920, eight dollars and thirty cents; last year, in November, ten dollars and thirty cents; to-day, nine dollars and ninety-five cents.

Q. These are the costs—A. F.o.b. cars at the bridge. That would show an increase of ninety-nine per cent—to-day's price. It went as high as one hundred [Alfred Rogers].

and six per cent last year. The freight from the bridge to Toronto increased from sixty cents to one dollar and fifteen cents to-day, or an increase of ninety-one and two-thirds per cent. The exchange increased over 1966 $\frac{2}{3}$ per cent. The cost on cars in Toronto was, in April, 1915, five dollars and sixty-six cents, as against to-day twelve dollars and thirty-four cents, or an increase of one hundred and eighteen per cent. The selling price in Toronto increased from seven dollars and a half in April, 1915, to fifteen dollars and a half, to-day, or an increase of one hundred and six and two-thirds per cent.

Q. That is to the consumer?—A. Yes, as against an increased cost to us of one hundred and eighteen and two-tenths per cent.

By Mr. McKenzie:

Q. Is that bituminous coal that you are reporting?—A. No, sir, anthracite. We are not interested in bituminous coal but to a very little extent.

By Mr. Cowan:

Q. You do not handle bituminous coal?—A. We do, but in very small quantities. We hardly bother with it at all.

By the Chairman:

Q. You have that information in the form of a table?—A. I will be pleased to send this to you, or I will leave this one.

The CHAIRMAN: Very well, have that inserted in the record.

COST OF COAL

NUT SIZE—NET TONS

—	Bridge	Inc.	Fgt.	Inc.	Exch.	Inc.	F.O.B. Cars Toronto	Inc.	Sell. Price	Inc.
	\$ cts.	Per cent	\$ cts.	Per cent	\$ cts.	Per cent	\$ cts.	Per cent	\$ cts.	Per cent
April, 1915.....	5 00		0 60		0 06		5 66		7 50	
" 1916.....	5 45	9	0 60		0 04		6 09	7.6	8 00	6 $\frac{2}{3}$
" 1917.....	5 36	7	0 66	10	0 01		6 03	6.5	9 00	20
" 1918.....	6 25	25	0 81	35	0 11	83 $\frac{1}{2}$	7 17	26.6	10 00	33 $\frac{1}{2}$
" 1919.....	7 85	57	1 00	66 $\frac{2}{3}$	0 26	433 $\frac{1}{2}$	9 11	60.9	11 50	53
" 1920.....	8 30	66	1 00	66 $\frac{2}{3}$	1 04	1,633 $\frac{1}{2}$	10 34	82.6	14 00	86
Nov., 1920.....	10 30	106	1 15	91 $\frac{1}{2}$	1 75	2,816 $\frac{1}{2}$	13 20	133.2	16 90	125 $\frac{1}{2}$
April, 1921.....	9 86	97.2	1 15	91 $\frac{1}{2}$	1 23	1,950	12 24	116.2	15 50	106 $\frac{2}{3}$
May, 1921.....	9 95	99	1 15	91 $\frac{1}{2}$	1 24	1,966 $\frac{1}{2}$	12 34	118.2	15 50	106 $\frac{2}{3}$

By Mr. Cowan:

Q. What I want to get at is the increased cost in production at the mines, so that we may compare the cost of the coal at the mines you deal with, with the cost of mining in Canada, because we have not much anthracite here.—A. I cannot give you the cost at the mines, sir, other than I have here. I will be pleased to send the cost at the bridge to you.

By Mr. McKenzie:

Q. What do you mean by "at the bridge"?—A. We buy at the bridge.

Mr. CHISHOLM: That is the Suspension bridge.

WITNESS: Yes, at Suspension bridge.

By Mr. McKenzie:

Q. At the line?—A. Yes, that is where we buy.

By the Chairman:

Q. The cost has increased very greatly these last few years?—A. Yes.

[Alfred Rogers].

Q. Will you tell the Committee briefly why that is so, and the conditions pertaining to the increased cost?—A. The cost has increased at the mines. Freights have gone up. The cost to the local dealers has gone up considerably. I have prepared a little table here of the costs—that is the cost that the dealers will have to meet. Wages with us since 1915 have increased one hundred and fifty-eight per cent; oats one hundred and twenty-five per cent. They are down somewhat now. Hay, ninety-four per cent. Bags have increased from eight cents to twenty-five cents apiece. In Toronto, all anthracite coal must be bagged. The cost of horse-shoes per hundredweight has increased from four dollars to eight dollars and thirty-five cents, or one hundred and eight per cent; lumber for planking, of which we use a great deal, has advanced one hundred and forty-three per cent, and our paints and all that—you see we do all our own painting and so on and so forth—have advanced very greatly, up to two hundred and ninety-one per cent for raw oil. Turpentine, five hundred and forty-eight per cent; varnish, one hundred and forty-three per cent. Truck tires, sixty-four per cent; steel, per hundredweight, one hundred and sixty-seven per cent; leather, one hundred and eleven per cent; hames, one hundred and fifty-six per cent, and shovels fifty per cent.

By Mr. Hocken:

Q. What is the cost of handling coal after you get it after you pay your freight?—

A. That depends; if you are working to capacity, your overhead is reduced very materially, but if you are not working to capacity, it is going up very handsomely. I have taken here from May, 1920, to November. I have not the other months, respecting freight, handling, selling, and general administration. In May it was two dollars and thirty-eight cents per ton. Add to that is forty cents for degradation, that is, for the screening of coal—it has amounted to somewhat more than that at times, but the lowest we have had it in the last three or four years is about thirty-eight cents a ton—

Q. That would be how much altogether?—A. I will give you the total in just a minute sir. Our shortage in car weights last year amounted to one and one-half per cent or in actual terms, four thousand six hundred and forty-one tons short in weight. You see we have to take the railroad weights as they come. That amounted to fifteen cents, or a total of two dollars and ninety-three cents per ton, and in November of that year, it went up to three dollars and sixty-nine cents per ton. October and December were about the same. That was owing to the fact that it was a very mild winter and very little coal was being delivered, and our overhead was going on just the same. In years gone by the average coal dealer always figured to lose money the first three or four months of his year owing to the fact that he was taking in coal and there was little going out. The last few years, people have been buying better, and in endeavouring to get people to buy, to lay in coal, we, as an association in Toronto, have been carrying on an advertising campaign to induce them to purchase, and we have found that more successful than individual advertising.

Q. You were doing that this year?—A. Yes, sir. The people as far as Toronto is concerned are doing very well. They are buying, but it is most desirable that they should buy, because I understand that all over the United States, and so on, there is very little coal being shipped to the West. If Ontario is not taken care of now, in the near future I fear you will have a considerable shortage next winter, especially if it happens to be a severe winter. I think Ontario was in worse shape last year than any year during the war, and had it not been for the mild winter, we would have had considerable hardship, especially in the smaller towns.

By Mr. Cowan:

Q. Who is taking care of the smaller towns in the way of advertising? Does your advertising include that of the smaller towns?—A. That is up to each locality, as far as I know. We are simply handling it as far as Toronto is concerned.

[Alfred Rogers].

Q. Your association has not undertaken any campaign for the province?—A. I am not interested in that. I do not think so. I have no recollection of doing it.

By the Chairman:

Q. On what information do you base your opinion that there may be a serious shortage later on in the year?—A. The mines are not selling; there is no demand.

Q. Are they producing?—A. They have not been producing to capacity; they have been closed down more or less.

By Mr. Hocken:

Q. Is that due to lack of demand?—A. Yes, sir; the public are not buying.

Q. You want a little more intensive advertising?—A. That is desirable as far as the public is concerned.

Q. If you take the average small dealer in the country, he has not one source of supply, but he will buy from two or three, and then when a shortage comes along and he tries to buy, he is of so little moment to any one operator that the operator will look after his larger dealers, rather than ship a car or two to Tom Jones, or whoever he may be, in the smaller towns.

Q. Did you not sell coal to the smaller towns in wholesale lots?—A. We have, but not in any intensive way. We only did that to help out and try to relieve the situation.

By Mr. Cowan:

Q. Did this Fuel Administrator's Office in Ontario do much of this advertising, when it was in existence?—A. I believe they did; I cannot say positively.

Q. You do not know whether the abolition of it will have a bad effect in Ontario? I understand it has recently been abolished?—A. Yes.

Q. Will that have an evil effect on Ontario?—A. In normal times, no. The advantage of having a Fuel Controller is that he should have knowledge of the coal shipped to each and every town, and then if there was a shortage of coal he should be able to decide the towns in which coal should be distributed. That was a decided advantage where towns were actually out of coal; then he was of great assistance.

Q. But I understand that this Fuel Administrator did quite a lot of advertising last year trying to get people to put in their coal early. That is not being done now?—A. I think it had a good effect last year, but, as far as Toronto was concerned, the citizens of Toronto as a whole were well supplied with coal.

By Mr. Hocken:

Q. That advertising was being done by your association or by the Fuel Controller?—A. No, sir; last year and this, we did that as the Retail Dealers' Association.

By Mr. Chisholm:

Q. You are a large importer of coal from the United States?—A. Yes—well, I would not say "large".

Q. Are you acquainted with the fields there—with the production of coal in the United States?—A. We know we are in touch with the best coal—

Q. I will take that for granted. The statement was made here that the supply of coal for Canada would be exhausted in ten years—that is anthracite coal—the explanation of that is that we are getting three and a half per cent of the total anthracite output of the United States?—A. Yes.

Q. And the statement was made that in view of the increase in population of the United States the extra population would demand this three and a half per cent,

[Alfred Rogers].

and that the output would not likely be increased, so therefore we could not expect to get coal from the United States after about ten years. What do you think of that?—A. Well, I am not in a position to say, but that is the first time I ever heard it, or ever had it intimated to us in any way that there was any reason for our anticipating a shortage in ten years.

By the Chairman:

Q. How much coal do you handle altogether?—A. Last year we handled about four hundred thousand tons in Toronto.

Q. And you had four thousand tons shortage?—A. Yes.

Q. Is that an abnormal shortage?—A. We think so, yes. They are weighing closer to-day than they used to weigh at the mines. Years ago there was always a certain amount allowed on a car to make up for loss in shipments, but now if there is any loss, we have to absorb it.

Q. Four thousand tons represents a lot of money at the present price of coal?—A. It does indeed.

By Mr. Douglas (Cape breton):

Q. That four hundred thousand tons is all anthracite?—A. Yes, practically all anthracite.

Q. You do very little business in soft coal?—A. No, we do not bother with it

By Mr. Cowan:

Q. Who does handle the bituminous coal?—A. You mean in Toronto?

Q. Anywhere in Ontario? We have not had anybody who said they handled bituminous coal.—A. It is done from the other side.

Q. The manufacturers themselves buy direct?—A. Very largely, yes. They buy direct. I think the Standard Fuel Company of Toronto is perhaps the largest handler of soft coal.

By the Chairman:

Q. How do you get your coal? By rail or water?—A. We used to bring it both ways, but latterly we have not. The water freights have been very high, and the degradation in handling by water is greater than by rail. It is easier to handle it by rail, because you can place it in the different yards around the city, teaming enters it so heavily that it does not pay to bring it in by water.

Q. So there are some disadvantages in handling it by water?—A. Yes.

Q. You say the degradation is greater?—A. Yes.

Q. How much greater?—A. You will find it is nearly twice as heavy.

By Mr. Cowan:

Q. Does the bituminous coal that is delivered in Ontario all come by rail?—A. No, there is a good deal comes by water.

Q. Evidently the manufacturers find it quite satisfactory? The degradation is not sufficient to debar them from bringing it that way?—A. By water?

Q. Yes.—A. Very few manufacturers bring it by water, outside of, I think, the Electric Light Company. The coal for the Gas Company I think all comes by rail. The waterworks bring in coal in that way.

Q. That is in Toronto?—A. Yes. I am only speaking of Toronto, sir.

By Mr. McKenzie:

Q. Mr. Rogers, as far as your trade in the city of Toronto is concerned, you encounter no difficulty in getting your supply of coal?—A. We have been pretty close to the cushion at times, sir, but at present coal has been coming in quite freely, and we have a good supply, and the people are buying.

[Alfred Rogers].

Q. You do not anticipate any departure from your way of doing business in long as we can induce them to buy, no, so that the demand does not come on us with a rush, because it is impossible for us to keep a complement of men and horses and trucks sufficient to take care of them all in a day,—especially if the weather gets cold.

Q. You do not anticipate any departure from your way of doing business in getting this anthracite coal and distributing it as usual? You do not anticipate any departure from your present line of business?—A. We have not thought of that, sir.

Q. There is an abundant supply?—A. Coal is coming very freely. There is some scarcity of stove coal.

Q. What I mean is this, Mr. Rogers: This Committee has been considering the possibility of the day arriving in Ontario, and other central parts of Canada, when we cannot get coal from the United States. We have been dealing with that question. Has that ever dawned on you?—A. No, sir, it has not. I think I will be gone before that.

Q. Then, for the present, you are not in any way disturbed about the scarcity?—A. Not the slightest. There may be a scarcity, but that will be in the fall, when it may be difficult to get coal, but I would imagine it would be because the demands on the mines from other districts will be greater in the fall, and there will be a great rush to get coal, up the Lakes.

By the Chairman:

Q. So that when you say that, Mr. Rogers, you admit there is a possibility of Ontario being short of coal at some season?—A. Yes. There is always a shortage in the fall, owing to their using all their endeavours to get coal up the Lakes, and then they ship into Ontario after the close of navigation.

By Mr. McKenzie:

Q. Did you ever consider the question of coke taking the place of anthracite when the day should arrive when you could not get anthracite?—A. That would be all right, they can use coke. We have never been able to sell much coke as domestic fuel in Toronto.

By Mr. Cowan:

Q. Why?—A. I do not know. They won't take it. They would rather have coal at the price.

By Mr. Douglas (Cape Breton):

Q. But coke is cheaper?—A. Yes. I would imagine coke would be cheaper but just what the price is I do not know, because I do not handle it.

Q. You do not handle coke?—A. We have nothing to do with it, and there has never been a demand sufficient to warrant our storing it.

By Mr. McKenzie:

Q. Do you know anything about the kind of a fire coke makes?—A. A very intense fire.

Q. Somebody has suggested here that it is difficult to make a fire—that it would not ignite?—A. It would be slower to get going, I think. I have had very little experience with it.

Q. But it makes a nice cooking fire, when it does start?—A. Yes, it makes a nice fire. They burn coke a great deal on the other side.

By the Chairman:

Q. Will you just fyle that statement of increases that you had?—A. Yes.

INCREASE IN CERTAIN COSTS

	1915	1920	Increase Per cent
Wages, teamsters, per week	\$ 13 00 (60 hrs.)	\$ 28 00 (50 hrs.)	158.5
Oats, per bushel	0 65½	1 47½	125
Hay, per ton	18 50	36 00	94.6
Bags, each	0 08	0 25	212.5
Horseshoes, per cwt.	4 00	8 35	108.7
Lumber for planking yard, per M.	32 00	78 00	143.7
Paints, etc., per lb.	0 65	1 70	161.5
Boiled oil, per gal.	0 80	2 85	256.2
Raw oil, per gal.	0 80	3 13	291.2
Turpentine, per gal.	0 65½	4 25	548.9
Varnish, per gal.	3 00	7 00	133.3
Truck tires	167 04	275 04	64.7
Steel, per cwt.	2 15	5 75	167.4
Leather, per lb.	0 45	0 95	111.1
Steel hames, per pr.	2 25	6 00	166.7
Shovels, per dozen	17 90	27 00	50.8

By Mr. McKenzie:

Well, we think there is a time coming when you will have to supply your own people with coke, that is, the finer grade of fuel, when you cannot get anthracite that you will have to furnish them with coke. There is a great field for the production of coke in Canada and no doubt it would be good fuel when we come to that?—A. It will be a good substitute in the event of our not getting anthracite coal, if it can be used.

Q. Mr Harrington told us that in ten years anthracite would be a difficult commodity to obtain. Now, do you not think as a good-headed business man that if it is possible that in ten years the people of Ontario, the people of Toronto, for instance, which is half the world, found they were coming up to a stage where anthracite could not be obtained, do you not think it would be wise to make some preparation in advance?—A. I certainly would, but I would want to check up the statement about ten years first, before spending money in preparation for a time after ten years.

Mr. DOUGLAS (Cape Breton): I think the witness said fifty years.

By Mr. Cowan:

Q. No, he said ten years. I have heard quite a number of people discussing the American anthracite situation?—A. Yes.

Q. And the longest term given by any one of them for the life of anthracite in the United States is one hundred years. They have not got any more than would last at present consumption that length of time, and the natural conclusion is that the American Government wanting that anthracite and owing to the short life will long before that prevent the export, will put an embargo on it, and of course we would share in that embargo. We have in view the establishment of a condition in Canada whereby we will use the fuel we have ourselves. At present it looks to me as if in Ontario the sentiment of the people is the greatest difficulty to the use of Canadian coals. Now I have always found in Ontario, especially the manufactures, urging a campaign to use goods made in Canada, Patriotically, and I quite agree with it. What would likely be the result supposing we were to launch a movement in Ontario to buy coals mined in Canada. Would they be as patriotic to the other provinces of Canada as they would expect the other provinces to be patriotic to them?—A. That would depend on the cost.

Q. Nothing beyond the cost?—A. I would not think so.

Q. Then that would not influence us to go beyond the cost in dealing patriotically with them. Their patriotism is one-sided?—A. I am not going to vouch for Ontario.

[Alfred Rogers].

The CHAIRMAN: I am afraid the Committee may be under a misapprehension when you made the statement that there is no danger to the fuel supply of Ontario. The fact is that we had one year, a few years ago, when there was a very great shortage in Ontario, was there not?—A. I don't think I said there was no danger of a shortage in Ontario. In answer to some questions, I said I did not anticipate a shortage in Toronto if the people continued to buy as they are buying and we are getting coal as freely as we are getting it.

Q. I got the impression from your statement that there is no danger in the future as to serious interference with our fuel supply.—A. I said I had not heard of it.

Q. There was one year there was a great shortage in Ontario?—A. Yes.

Q. Each year for the last two or three years there has been a considerable shortage in the fall, considerable difficulty in getting supplies in the fall?—A. There has always been that difficulty ever since I can remember.

Q. So we have a seasonal difficulty now. We are not discussing the cost of it at all?—A. Yes.

Q. And we also have occasionally a year's difficulty, so to speak?—A. Yes.

Q. In face of that we are entirely dependent on the American coal for our supply?—A. Of anthracite, absolutely.

Q. The Committee of course is anxious to ascertain whether it is possible in any way to meet the seasonal shortage or to meet a situation which may arise under which Ontario would be left with a very meagre supply of coal for our needs.—A. Of course the simplest way is to induce the people to buy, because I don't think we have sufficient storage capacity to take care of our entire winter's requirements. If the people will not lay in their cellars a goodly proportion of it, we will be short of coal next winter.

By Mr. Cowan:

Q. What differential are you granting the people to fill up their cellars now?—A. We don't grant any differential. Our price is \$15.50 in Toronto.

Q. You don't give them any inducement to lay in their coal?—A. The price is 1.40 lower than it was last year as an inducement to get the people to buy now.

By Mr. Douglas (Cape Breton):

Q. It goes up ten cents a month?—A. It advanced yesterday.

Q. What inducement are you giving them?—A. The drop in Toronto is anywhere from \$1.25 to \$1.40. There were several different prices in Toronto last year. Different dealers are paying different prices to get their coals.

By Mr. Chisholm:

Q. You say you are reducing it now to induce them to get their coal in. Is that reduction proportionate with the reduction on the American side?—A. If we can keep our equipment going we can afford to sell coal cheaper. If the people are not buying at the present time we will be playing to a loss.

By Mr. Cowan:

Q. Do the mines grant you a differential which will enable you to grant a differential?—A. There is a drop of fifty cents, but I presume it will start at the rate of ten cents a month.

Q. When does this start?—A. It started this month.

Mr. McKENZIE: What do you mean by differential?

Mr. COWAN: That is what we speak of in the West. A differential is granted. "Differential" means special for the month of say April, fifty cents lower than the regular price next month, and it will increase ten cents and go on increasing ten cents a month until it gets back to normal prices again.

[Alfred Rogers].

By Mr. McKenzie:

Q. In certain periods of the year they sell it lower?—A. Yes, in order to induce the people to lay in their stock at a certain time.

Q. Do I understand you to say that shipping coal to Toronto, say anthracite, by water is more expensive than by rail?—A. We have found it so. Last year and this year the freight was \$2 a ton. Then there are harbour dues charged which are added to that, fourteen or fifteen cents, but the breakage and degradation in the coal is much greater than handling by rail.

Q. You find it cheaper to handle it by rail?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. \$2 a ton from where?—A. Oswego. We used to bring it across for 25 cents a ton, but I think the rates are lower. We have not brought any in this year. That is what we paid last year.

By Mr. Cowan:

Q. You said some people brought in their soft coal by water?—A. Yes.

Q. Have they a plant at the harbour in Toronto, or elsewhere for handling soft coal?—A. Yes, there is a plant there to unload vessels and store coal.

Q. That is soft coal?—A. Yes.

Q. Has it rail connections from there?—A. Yes, coal has been brought by water, and during the hard times, I think, two years ago, when we had a severe winter, coal was shipped from that dock.

Q. Provided they could get the proper transportation rates on the St. Lawrence to bring Nova Scotia coal, in vessels, could Toronto handle it?—A. I would fancy the Toronto Coal and Dock Company could handle very large quantities. We could ourselves handle a very considerable quantity if it was desirable.

By the Chairman:

Q. What would be the total storage facilities in Toronto for anthracite coal?—A. I would think about—oh, it must be in the neighbourhood—that is under cover, you mean?

Q. The total storage.—A. I think we can store about 90,000 to 100,000 tons under cover and we could store two or three times that much outside if required.

Q. What would you think of the plan of increasing storage facilities there, of the dealers buying their coal at this season of the year and storing it up for the winter and fall?—A. At the present rate it would cost you about 7 cents a ton a month to carry it.

Q. Any other objections?—A. The cost of land and taxation; but I would say there is in Toronto at the present time—we have about 40,000 tons in storage ourselves now. I would say about half that much more, about 20,000 tons outside of that in Toronto.

Q. If a situation developed where the export of coal from the United States to Ontario was threatened to be cut off what are the people of Ontario going to do for their supply? Increased storage, laying in a stock of coal would be one method of providing for the supply. I was just wondering what the possibilities of that plan are—A. Of laying in a supply?

Q. Yes.—A. That is you mean of our own Canadian coal?

Q. No, American coal.—A. Of course, I am only speaking of anthracite for the people of Ontario. They use about 800,000 tons in Toronto, a little more than that.

Q. You have present storage facilities to accommodate about how much?—A. One hundred thousand tons I think under cover.

Q. At the most 25 to 50 per cent of that?—A. Yes.

[Alfred Rogers].

Q. That does not offer much encouragement to the province as a source of supply of coal?—A. No. You could not count on it in our experience of supply at all but we have to educate the people in the country to purchase their coal now because the average dealer in the country could not afford to carry sufficient to take care of the people unless the people put their coal in and helped them finance.

By Mr. McKenzie:

Q. How do you account for this holding back or declining to buy?—A. In Toronto our advertising campaign has been very successful. I think there was an impression that coal was going to drop further. I think they were holding off expecting that. That seems to be the impression of the general public.

By Mr. Chisholm:

Q. Have you any hope of that?—A. Not so far, unless they get a reduction in freight rates. Some of the mines yesterday advanced 25 cents a ton. The larger line companies only advanced 10 cents but some of the smaller operators advanced as much as 25 cents a ton yesterday.

By Mr. McKenzie:

Q. We have got very good information from you but we have a job on hand here and we are trying to do something. Now you have no fear about the situation in Toronto. You think you can get plenty of coal there. Would you think both yourselves and those who are in the trade with you can look after the requirements of the people of Toronto all right?—A. I would think so.

Q. You have no fear of falling short in your supply?—A. I do not anticipate any this year.

Q. That being settled is there any possibility of getting coal cheaper for the people of Toronto than they are getting it now?—A. I don't know how.

Q. The homes are all heated by furnaces in Toronto?—A. Yes.

Q. Is it anthracite coal they are burning in these furnaces?—A. Practically altogether. Nearly all one size.

Q. Those furnaces could burn soft coal, could they not?—A. I would not imagine so, not successfully. You would have to get an expert on stoves to advise you on that.

Q. I don't know just what the make of the furnaces is but we have all kinds of furnaces out our way, heating with hot water.—A. The average furnace for a ten-roomed house would have a vertical firepot. I figure they are too deep for the use of soft coal.

Q. Unless they fired very lightly.

By Mr. Chisholm:

Q. It is a question of getting more air and ventilation?—A. Yes.

By Mr. Cowan:

Q. Have you ever been approached by any of the representatives of the big coal mining companies of Nova Scotia to induce you to experiment with Nova Scotia coal?—A. We brought in some Nova Scotia coal during the strike in 1903, I think it was, but unfortunately the strike ended just when the coal arrived and we did not have an opportunity of trying it out.

Q. Did you bring it up by boat?—A. Yes.

Q. Was it degraded at all?—A. It had slacked considerably.

Q. More so than the American coal?—A. Well we thought it had at that time. It would receive perhaps more handling than the American coal would receive.

By Mr. Chisholm:

Q. American what, anthracite or bituminous?—A. Bituminous.

[Alfred Rogers].

By Mr. Cowan:

Q. You don't know how it compared with American coal?—A. I could not say. It was a long time ago and we were jolly sorry it came in because the strike was over when we got it there.

Q. This American soft coal you are getting into Ontario, I should judge it is mighty inferior stuff?—A. Some of it has been very, very poor.

By Mr. Keefer:

Q. What was the freight rate on that coal you brought in in 1903?—A. I could not say. I don't think I could get those records for you either.

Q. I suppose if you could bring it through in one ship without breaking bulk it would be an advantage?—A. That would be a big advantage.

Q. In what way?—A. There would be less breakage.

Q. Also less freight rate?—A. I presume there would. There is less handling.

Q. A larger ship would carry more coal?—A. Yes.

Q. But it would be a benefit to the coal also in the sense of handling. You would get a better quality?—A. Yes.

Q. Is there any way of estimating what the effect is on the handling of coal in the way of loss per ton, say a ton of coal?—A. I have had no experience of bituminous coal in this respect. I could not say.

Q. You bring your coal in from the States all rail?—A. All rail practically. We used to bring in a great deal of water coal.

Q. Why the difference?—A. It is easier to handle and we have to distribute around Toronto. In the olden days we brought it in by water and teamed it to the different yards.

Q. Toronto has grown so much?—A. Oh, yes. Hauling is the big item.

The CHAIRMAN: Any other questions to ask this gentleman? We have another witness here to day. We might get through with him.

By Mr. Cowan:

Q. Have you found the Canadian freight rates increased higher than on the American side? Or are you able to answer that?—A. I think we increased proportionately the same. I would be very pleased to get that information and send it to you. I did give you the percentage of that increase, did I not?

Mr. COWAN: It is all right, Mr. Rogers.

The CHAIRMAN: Anything further?

By Mr. McKenzie:

Q. Take an ordinary householder, not a wealthy man but an ordinary householder in your city, what does his supply of anthracite cost him a year on an average?—A. The price per ton is \$15.50. It has been as high as \$16.90 and \$17.

Q. In that event you have an idea as to how many tons a man takes for a season of the year?—A. The average amount, that is a ten or twelve-roomed house, would run from six to eight or ten tons.

Q. Ten tons at \$15 a ton?—A. Yes.

By Mr. Keefer:

Q. What was the price of soft coal in Toronto at the same time?—A. The price of soft coal?

Q. Yes, delivered to the consumer?—A. Practically all the soft coal handled in Toronto is car lots. It is a car lot price, plus teaming.

Q. Supposing I wanted to buy ten tons of soft coal—anthracite is \$17 or \$18, what would the soft coal stand me?—A. I fancy it would run around \$9, in that neighbourhood.

[Alfred Rogers].

Q. Are you able to say that there is a ratio of two tons of soft coal to one of hard coal in value in heating power?—A. No, I could not say.

The CHAIRMAN: We have Mr. L. E. Drummond, of Edmonton, here. Before Mr. Drummond takes the witness stand I have a letter which I would like to read to you from the Canadian Manufacturers' Association.

Mr. KEEFER: Is the stenographer going to take down all that is said now?

The CHAIRMAN: I presume so.

Mr. KEEFER: Is the reference to this letter to go in? We usually have some discussion on correspondence. Do you think it is necessary to go in? It will make the record quite lengthy.

The CHAIRMAN: Cut out the discussion.

Letter read and handed in.

CANADIAN MANUFACTURERS ASSOCIATION,

TORONTO, April 23, 1921.

Dr. MICHAEL STEELE, Chairman,
Special Committee on Fuel Supply,
House of Commons,
Ottawa, Ont.

Dear Sir:—

With further reference to my letter of the 8th inst., and your reply thereto of the 11th inst., we have been giving some consideration to the subject your Committee is now investigating, in order to determine the manner in which we might be of assistance to you.

In our study of the problem we have to a considerable extent used the information supplied by the various Departments of the Federal and Provincial Governments, and in as much as you are calling the officials of these departments before you and are developing much more complete evidence than has hitherto been published, we feel that we are profiting to a very large extent by the splendid information your examination is bringing out.

In addition to such evidence as the Departmental officials are in a position to supply, you are able through the powers vested in your Committee to procure light on this subject from many other sources and your study of the problem will undoubtedly be of immense value to the public.

While your Committee may find as a result of your investigations ways and means of making coal consumers in this country less dependent on foreign supplies, we are of the opinion that publicity in respect to the supply and quality of Canadian coal will do much to promote its general use.

It may be said that this is primarily a matter of salesmanship and that such publicity should be influenced by the coal producers and distributors, but we feel that the problem goes further than that. The crisis through which we have passed has been costly. It has reflected itself in the price of all manufactured articles. It has given rise to great anxiety and in many cases has been the cause of hardship and suffering. Then again, we must consider that the coal deposits in this country are the most valuable of our natural resources which after all may be considered as the foundation of our national wealth, and while we have not so far been able to reap their full advantage owing to the fact that they are somewhat inconveniently placed, they will in the not far distant future contribute in increasing ratio to Canadian production.

[Alfred Rogers].

The problem is to hasten the greater use of our coal supplies and as the use of them will in turn induce other forms of production we submit that the Dominion and Provincial Governments, Transportation interests and Associations representative of consumers should combine with producers and distributors to promote the greater use of Canadian fuel by Canadian consumers.

As an Association representative of large consumers we will be glad to assist in the development of any educational programme having this object in view.

In the past we have directed the attention of our members to the desirability in the national interest of using Canadian coal wherever it might be procurable at reasonable cost. We have also through our representatives conferred with the authorities in the province of Alberta, and with representatives of the Alberta coal producers, with the object of stimulating greater distribution of Alberta coal within the area of reasonable transportation.

In July of 1920 we submitted a questionnaire to our members requesting information respecting the tonnage required per annum and the amount of coal on hand. We received replies from 747 members showing a tonnage on hand of 242,840, their annual requirements being 2,617,139. The Dominion Bureau of Statistics in a report covering Industrial-Production for the year 1918 shows a coal consumption of approximately 7,000,000 tons. If such figures represent a fair average annual consumption the annual requirements of those who replied to our questionnaire would represent about 37 per cent of the total annual industrial consumption. In view of the fact that about four months of the coal year commencing April 1, had elapsed at the time our figures were compiled, we estimated that the amount required for the balance of the year would be $\frac{3}{4}$ of the annual requirements, which we worked out at 1,744,760 tons. At a period when the manufacturers ordinarily would be fairly well stocked, we found that industry was in the position of having slightly less than 15 per cent on hand to meet the requirements of the coming winter.

Many of our members reported that they had contracted for a supply of coal at ruling contract prices earlier in the year, which in the case of American coal would average about \$3.50 per ton at the mines, but many of these complained that contract coal was not moving in. The result was that these large consumers had to procure their supplies where possible in the open market, paying prices out of all proportion to the reasonable cost of production.

In an article contributed by Mr. E. E. Lucas, appearing in the final report of the Fuel Controller, issued on March 19, the following statement appears on page 77—

“I cannot speak with authority for the coal mining industry, but I think it is quite within the bounds of possibility that the output of coal from Canadian mines could be almost doubled from existing openings. If so we would either have enough in Canada to supply our needs provided we could get it where it is needed, or be in a position to balance accounts with the United States by exporting a portion of our output.”

During the period of Fuel Control when fixed prices were effective, Canadian prices were much higher than American prices, and we presume they were fixed at a reasonable advance over cost. If however Canadian openings are capable of doubling their production as indicated by Mr. Lucas, and are through the co-operation of the agencies we have previously mentioned able to increase their production, the unit of cost through developing greater constancy in employment and adopting more efficient mining methods, should be reduced, and in proportion to the reduction in cost the area of distribution should be increased.

Good salesmanship strongly supported by the Alberta Government has been effective in influencing the use to a very large extent of Alberta coal in the province of Manitoba, and particularly in the city of Winnipeg. Co-ordinated effort such as we are suggesting, on a national scale, will we believe still further extend the area of distribution.

Yours faithfully,

J. E. Walsh,, General Manager.

LEONARD E. DRUMMOND, called, sworn and examined.

By the Chairman:

Q. What is your occupation?—A. Consulting engineer and Mining Engineer.

Q. Where?—A. Edmonton.

Q. How long have you been engaged in that occupation?—A. About sixteen years, in general engineering work.

Q. What connection have you had with the coal industry?—A. As a construction engineer for the Dominion Coal Company and for the Cumberland Railway and Coal Company.

By Mr. Cowan:

Q. That is in Nova Scotia?—A. Yes. With the James W. Ellsworth Co., in Pennsylvania; the International Coal Co., and the Canadian Pacific Railway.

By the Chairman:

Q. In what capacity were you employed by the C.P.R.?—A. I was construction engineer and mining engineer, and for the last eleven years I have been with the Mountain Park Coal Co., West of Edmonton, as construction engineer and business manager.

Q. Have you prepared a statement for the Committee?—A. Before I go on, may I read two or three telegrams which came to me this morning, Mr. Chairman?

Q. Yes.—A. One is practically the same as the one which you received from Mr. Young:—

“In view of certain references in Western newspapers which indicate possible misunderstanding with regard to duty on incoming American coal”—

The CHAIRMAN: That is already on the record.

WITNESS: It is? Very well. There is another telegram which came to hand along much the same lines from the Northern Alberta Coal Operators' Association, asking us to contradict the statements. It reads:—

“Northern Alberta Coal Operators' Association ask you to contradict statement that removal of duty would make no difference to coal trade. Keenest competition with American coal for Manitoba market has developed and the retention of duty combined with lower freight rates absolutely necessary for best Canadian interests.

(Sgd.) “J. C. Dunn.”

Then I have also a wire which I received from the Alberta Industrial Development Association, as follows:—

"The increased consumption of Canadian coal means a stimulation of every Canadian industrial enterprise. We would urge that the good work which has been initiated will be carried on by a commission of three qualified men from Nova Scotia, Alberta, and British Columbia, with the express purpose of using every effort to promote development along economic lines and co-ordinate the efforts of the Provincial Governments along broad national lines.

(Sgd.) "The Alberta Industrial Development Association."

Mr. McKENZIE: Mr. Chairman, will you please give the Committee just an idea of what this gentleman is called for, so that we may grasp more intelligently what he has to say, which we can do if we know for what purpose he is called. Had you anything definite in mind when this man was called?

The CHAIRMAN: I might say that shortly after the Committee was appointed, I had a letter from Mr. J. E. Walsh, who is, if I understand properly, the general manager of the Canadian Manufacturers' Association, saying they were very much interested in this question of the fuel supply of Canada; that they had had a committee studying the matter last year, and had collected a good deal of information; that they had the co-operation of the gentleman who is before us to-day, Mr. L. E. Drummond, and in that letter they suggested that Mr. Drummond would be qualified to give us information from their point of view—from the industrial point of view—on these questions.

I might say that prior to receiving that letter, I had also written to the Canadian Manufacturers' Association, knowing their interest in the matter, as I wrote to many other parties, suggesting their co-operation, assistance, help and interest in the work of this Committee, and it was in response to that that the suggestion of the Canadian Manufacturers' Association that Mr. Drummond be called, was made. I might say that we have had frequent references to Mr. Drummond, by other parties, as a man well qualified to give this Committee information which would be valuable to us.

Mr. McKENZIE: The reason I asked this question was that in this Committee's investigations, as in every court, there are certain things to be tried and certain issues to be raised before the court, and we expect witnesses to be directed to these issues. I am not at all trying to dictate what this witness will say, but I would like to have an idea of what his story will be to us, so we can concentrate our thoughts on the ideas which he will give us. That is all.

Mr. COWAN: As this witness has already read a statement from the Alberta Industrial Development Association, I would like to ask him a question.

The CHAIRMAN: Very well.

By Mr. Cowan:

Q. Who is this association? What is their purpose, and how long have they been in existence? Also, are they financed by the provincial Government?—A. The Alberta Industrial Association was formed some three years ago, I think it was, with the idea of trying to see what could be done along industrial lines in Alberta, and it succeeded at that time in obtaining a considerable amount of money, not only from the Alberta Government, but from almost all industries and interests in the province of Alberta, with the idea of inducing outside interests to come there, and they would supply them with such information as might be possible. They have each year brought up a number of representatives from the United States and from Eastern Canada, with the idea of giving them first hand information. Last year the Manufacturers' Association had a very large number of their members come west and they [Leonard E. Drummond].

were given a great deal of data on the western situation and what could be done not only from the fuel end of it, but from every end of the business development, and they felt, and have always felt, that the development of fuel in the West would mean the development of Canada and possibly there were certain industries who would find it even cheaper to make their centres farther west, nearer the coal fields.

Mr. COWAN: That is a point which I wished to make, Mr. Chairman, that the Alberta Government is wide-awake to the possibilities of building up industries where there are coal fields, and the value of the coal fields to Canadian industries.

By the Chairman:

Q. Will you proceed with your statement, Mr. Drummond?—A. May I make one statement? I do not know what was intended exactly, but I have wanted to make one statement here. In looking over the evidence of the previous witnesses, I do not think it has been quite apparent that a great deal of the western coal is a domestic coal, which is essentially different from what has been mentioned here as soft coal.

Mr. COWAN: That is the very point I mentioned the other day, Mr. Chairman. I think it will be well to get that in the minds of the Committee, that the western men speak of western coal in different terms than the eastern men.

The CHAIRMAN: I think the witness had better proceed.

WITNESS: The point is this: You have in Nova Scotia, soft coal, or bituminous coal—probably it would be well to drop the words “soft coal” because it is always a little inclined to be confusing. You have in Nova Scotia your true bituminous coal which is a coking coal. You also have in the West—possibly it would be better to know in this regard that the possibilities of bituminous coal in the West are greater than in Nova Scotia.

By Mr. Douglas (Cape Breton):

Q. Greater in quantity?—A. Yes, greater in quantity. What I am trying to get at is that you have a problem in Canada—

By Mr. McKenzie:

Q. When you say “domestic coal” and “bituminous coal,” are they different?—A. Absolutely different.

Q. What do you mean by that?—A. I mean that domestic coal will take the place of anthracite, and that is all I mean. The two words are identical as far as my evidence is concerned.

Q. I want to get that clear in my mind. You are speaking about domestic coal and bituminous coal?—A. Yes.

Q. Is domestic coal a higher grade of coal?—A. Domestic coal may not be a higher grade of coal. I mean by “domestic coal” a free burning coal, which under low-draught conditions will ignite and burn freely, taking that as against bituminous coal which requires a more or less high draught, and which will coke over—do you follow me?

Q. Yes. Domestic coal will not coke?—A. The domestic coal to which I refer is not coking coal at all.

By Mr. Chisholm:

Q. You have been referring to the West?—A. Yes. As far as Nova Scotia is concerned, they have no domestic coal, it is purely a true bituminous coal in Nova Scotia.

Q. We regard that as good domestic coal?—A. Yes, it is true steaming coal. We have the same condition in the west, and in speaking of the market in Central

[Leonard E. Drummond].

Canada, we have those free burning coals which do not require a great deal of attention, and do not require special conditions, and there are the two essentials; you can get the highest grade, which is anthracite, and you have in Western Canada a great deal of coal which I might say was highly satisfactory, that is it is in a much lower stratum in which there are a great many domestic coals which will take the place of that anthracite. I wanted to make that clear, because in looking over the evidence, it was not quite distinct. Possibly, I might be allowed to amplify on that, just a little bit. As Mr. Pitcher, I think it was, explained the other day, we have in Alberta essentially a crustaceous coal. There are in that province the three periods which are quite distinct; the top-coal, or what is called the "Edmonton series"—that does not relate to the district known as Edmonton, or that particular portion of the province, but the upper portion of the crustaceous series is known as the Edmonton series.

Then lower down in the same stratum, you have your "Belly River series" and still lower down the "Kootenay series".

Now, the two bituminous coals which correspond with the Nova Scotia coals are those in the mountains where the upthrust or pressure has been sufficient to throw up these lower measures and bring them to the surface. Necessarily you will see that where that action has taken place, the coal is usually on a high pitch and the cost of mining is usually higher because not only is the coal a lot more difficult to mine, but the roof conditions, and the coal conditions are such that it requires more expense in carrying on mining operations. It also requires more attention because the strata immediately above the coal is more friable, which usually causes a certain amount of that upper strata to get into the coal which requires more picking, and so forth.

I notice in your evidence a great deal of criticism as far as costs are concerned. I might say a word right here in regard to the costs in the Kootenay series. In the Kootenay measures the cost is probably four times as much as it is down on the prairies where the conditions are flat, which are comparable to the American conditions. In Pennsylvania, as you know, the conditions in the bituminous districts are practically flat faces,—flat seams. You have conditions somewhat similar in Alberta at some distance out from the mountains where the condition of the coal is not equal to the Pennsylvania coal. I wanted to point out that the condition in the mountains where you have this upthrust, and where the coal was brought to the surface—the mining conditions are more severe and the costs are higher. If there are any questions you would like to ask in this connection, I would be glad to answer them just as soon as I am through with these points.

Farther out from the mountains we get away from the mountainous action and we get into the Belly River series which is the next oldest series containing coal in Alberta. There we have very remarkable conditions, and I wanted to bring it out because you have made remarks about the cost of mining. There are conditions in the Belly River series where the cost of mining will be very much what it is in Pennsylvania, although in Pennsylvania the mining conditions are very extraordinary, and the cost very low. There has been coal sold during naught-three—bituminous coal sold for as low as eighty-six cents, that I know of.

By Mr. Keefer:

Q. Where?—A. From the No. 8 district, or South Pittsburgh.

By Mr. Cowan:

Q. That is in the United States?—A. Yes, so I am rather guarded in saying that we can beat that price, but I think we can.

By Mr. Keefer:

Q. That was at the pit mouth?—A. F.O.B. the mines. The conditions to which I refer are in districts where the seams are probably larger than any place else in [Leonard E. Drummond].

the world. Last week I was out on the Alberta Coal Branch, which is about one hundred and thirty-seven miles west of Edmonton, and there we have exposures of coal forty or fifty feet thick, mined by steam-shovels. At the present time the conditions there are only in the development stage, so that the operations are perhaps not as efficient, nor are they as carefully done as they will be in the future, but you can readily see that the cost of mining there by steam-shovel will be very cheap, as compared to underground mining conditions where the over-burden is naturally fractured to a certain extent, on account of the bend, and a great many other incidental causes.

Now, in that district, you will probably be able to mine cheaper coal than any point in your Pennsylvania district, but it is the cost of transportation which will mitigate against its use. I might also say that this coal on account of the pressure in the foothills—I do not know whether that is clear or not—

Mr. KEEFER: Yes, go on.

WITNESS: The movement as you approach the mountains causes a pressure there and that pressure has improved the condition of those coals. Those Belly River coals ordinarily will contain perhaps nine to twelve per cent moisture, given the condition out on the prairie, but where that movement has taken place near the foothills, the moisture has been decreased, so that it approaches nearer two to five per cent.

Now, what I wanted to make clear as far as this coal was concerned, and even with the younger coal again, which is known as the Edmonton coal, extending all over the province and down into Saskatchewan, is that one coal overlaps the quality of another coal due to the local conditions and the pressure to which it has been subjected, so that your coal which ordinarily would be lignite will after being subjected to this pressure have been improved in quality until it approximates very nearly the next grade of coal, and I want to make it perfectly clear that there are coals of every quality in that western field to take the place of any coal which you may have from the east.

Referring back to the Kootenay coal. The market for this Kooteney coal is almost entirely confined to the railroads for railway use. During the last year, there has been a certain amount sold for industrial purposes, but it has been limited on account of its competition with the American coal. The Hon. Mr. Cote, Mr. Pitcher, and Mr. Young have all given some information along these lines, but I wanted to bring out more particularly the use of the coal from the Belly River series and the Edmonton series, because the distinction has not been emphasized. These coals are in competition provided the price is low enough. The railroads during certain periods of the year are enforced to burn the bituminous coal as against the other coals which are more clean burning, and which do not coke, because they are prevented from using these coals during certain seasons as it throws off sparks and ignites, under certain conditions, the crops and the forests, and therefore during the summer period the railroads are prevented from using the lignite and free burning coals; however, that does not apply to industrial use, and when the Alberta Government made careful tests last winter in Winnipeg, the lignite coals were the ones which gave the most efficient results, on account of lower prices at which they purchased those coals. You have—

By Mr. McKenzie:

in Winnipeg, the lignite coals were the ones which gave the most efficient results, because they were the lowest in price? Is that what you meant?—A. I mean on account of their lower price they gave good results, but the results from the efficiency standpoint, was not as great as the higher grade true bituminous coal.

Q. I thought you were making a slip there, because the price would have nothing to do with the efficiency.—A. Not at all, but the use of this coal becomes

[Leonard E. Drummond].

more economical on account of their cheaper price. The bituminous coals are very much higher in efficiency; our bituminous coals in the west are running up to as high as fourteen thousand and fourteen thousand and two or three hundred British Thermal Units, but while the coal from the Prairies is a high grade lignite,—what you might almost call block coal—it does not run possibly more than twelve thousand at the outside, but on account of their cheaper price, they work it out very efficiently, and very satisfactorily, as I say, in the Winnipeg market.

By Mr. Ball:

Q. When you come to transporting coal; efficiency is everything in transportation? —A. Every coal has a fuel value and a cheaper coal has been transported for considerable distances, although, as you say, unless the coal has the efficiency, on the longer distances, it would not be able to stand up.

Q. A lot of it is dear at any price.—A. Precisely, but you must remember that a lot of those coals in the west, very closely approximate the efficiency of your bituminous coal.

I would like to bring out another point in regard to the markets, which I do not think has been emphasized before. It has been stated by a representative of the Canadian National that they are burning their coal as far as Winnipeg, and one or two divisions beyond Winnipeg during this year—

By Mr. Chisholm:

Q. Burning what coal? You say “their coal.” What do you mean?

By Mr. Keefer:

Q. What coal are they bringing east of Winnipeg?—A. They are burning Mountain Park, Brule coal, and the Brazeau coal. On the other hand, the C.P.R. have for a great number of years taken their coal only to Broadview, which is one divisional point west of the Manitoba boundary, and they have made it more or less of a rule, that that was the point where the cost of eastern coal equalized the cost of western coal. I do not think it is for any person to dispute that, except that we cannot see why the C.P.R. should discriminate against western coal, when some of us have been on tests in Winnipeg on the Canadian National and demonstrated to the Canadian National the efficiency of western coal for use in locomotives, and as a result have obtained orders for western coal into Winnipeg, or rather I would say into Rivers, which is the first divisional point west of Winnipeg.

By Mr. Douglas (Cape Breton):

Q. Could you use the map right behind you in connection with that statement?—A. Broadview is right here (indicating), while the Canadian National—I have been on tests as far as Rivers, which is the first divisional point west of Winnipeg.

By Mr. Keefer:

Q. “Broadview is right here” does not mean anything on the record. Just describe a little more in detail.—A. It is the first divisional point west of the Manitoba boundary.

Mr. COWAN: It is seven hundred miles west of Fort William.

Mr. DOUGLAS (Cape Breton): How far west of Winnipeg?

Mr. COWAN: Two hundred odd miles west of Winnipeg.

By Mr. Douglas (Cape Breton):

Q. And the Canadian National takes it two or three hundred miles east of Winnipeg?—A. I do not know just how far. They have been using it two divisions east of Winnipeg.

[Leonard E. Drummond].

Q. Probably about three hundred miles?—A. Probably so. I know they have used it east of Winnipeg during the last year, but how far I am not prepared to say.

By Mr. Cowan:

Q. In other words, the C.P.R. are bringing or using the coal to about equal points between Fort William and the Mountains?—A. Yes.

Q. And in addition to transportation by their railway, they have the lake transportation and the rail transportation in Pennsylvania to pay for?—A. Yes.

Mr. COWAN: It seems to me a most absurd proposition.

By Mr. Douglas (Cape Breton):

Q. Why is the C.P.R. doing that? What is the reason for that?—A. I do not know, I am sure.

Q. They own mines in the States; I suppose that has some bearing on it?

The CHAIRMAN: I may say for the benefit of the Committee that we will have representatives here from the C.P.R. and perhaps they can give this information better than this witness.

Mr. DOUGLAS (Cape Breton): It is quite advantageous getting it from Mr. Drummond.

The CHAIRMAN: If he has knowledge of it, all right, but if he has not, it would seem to me to be a waste of time to ask him.

Mr. McKenzie:

Q. Try and get his statement consecutively if he has a statement to make.—A. I wanted to bring out one point there and it may be of some advantage, that is that I think the railroads, particularly the C.P.R., have not taken into consideration the freight which results from the development of the western collieries. In taking the matter up about a year ago with the Grand Trunk I examined the records to determine just what freight they were receiving from a colliery of, say, 1,000 tons a day, in order to determine how much it meant to the railway company for the development of our western collieries. I don't know whether I make that clear. It means freight resulting from foodstuffs and freight resulting from supplies for mining use and general use—I found that the Mountain Park Coal Company, whom I was with at that time, were spending, or rather put it this way, that the separate business of the Mountain Park Coal Company and others who were purchasing material did so to the extent of about \$50,000 per month, which must have amounted to a considerable revenue for the railroad company and surely that is a factor to the railway companies, the development of those western collieries, the increase in population and the increase in the amount of revenue which they will obtain from their commercial tonnage. They have been in the past saying to us: "We can obtain coal from Pennsylvania at such and such a price. We can transport that at half a cent a ton mile" or whatever the amount is they usually work on. Half a cent a ton mile was what was usually suggested to us and, "We cannot purchase your coal beyond a certain point." They have not taken into consideration the development of these collieries, the amount of freight which they secured from the development of those collieries. I think it is a point probably worth while mentioning.

By Mr. Chisholm:

Q. Business of all kinds, passengers and everything else.—A. Yes.

By Mr. Cowan:

Q. Every kind of business?—A. Yes.

By Mr. Douglas:

Q. Building up our own country?—A. Yes. There were some points—at least there were not a great many recommendations made on the Western situation and if I might be allowed I would like to make one or two suggestions, as far as industrial and domestic propositions are concerned it would be advantageous probably for some grading system to be installed so that there will be no question as to the relative values of those western coals. You will readily see that on account of the large investment in Western Canada, some of which has been probably not wisely invested it will be very difficult for any grading to be done of those Western coals unless it is done under Government supervision because each of the interests feel that their coal is probably one of the best coals in the West or at least will not be prepared to admit that they are anything below any other other coals, that their grade is below anyone else's coal.

Mr. KEEFER: That is not local to the West. We find that in Nova Scotia.

Mr. CHISHOLM: That is slightly exaggerated.

WITNESS: But the only thing is we have every grade of coal in the West and the question is a little more complex.

By Mr. Cowan:

Q. You have been associated with Nova Scotia coal and Western coal and you understand American coal?—A. Yes.

Q. Supposing we were to establish a grading system in Canada, would the Canadian coals generally, that is, the best of our coals stand up against American competition in grading? What would be the effect?—A. I do not think it would be detrimental to our Canadian coals at all provided you took that grade as the coal came. As I was explaining a few minutes ago there are some difficulties with our Western coal. The value of picked samples of Western coal will equal anything you can get in the United States.

Q. That is exactly what I wanted to find out. You are satisfied there are bituminous coals or good coals in Canada that are used for domestic purposes, soft coal if you like to call it, that is equal to American coal?—A. Yes.

Q. That is what I have been trying to get all along. I was not able to get it.—A. There is no question as to the value of those coals. I have all kinds of analyses, most of them I have made myself of both Canadian and American coals and there is no question at all as to the relative values of the coals. We have as good coals in the West as were ever mined in the United States.

Q. Hear, hear. You say in the West. Does that also apply to Nova Scotia?—A. Yes.

Q. That is the best thing we have got yet Mr. Chairman. It has taken me two weeks to get it.

By Mr. Ball:

Q. Your Western coals differ in quality in different mines?—A. They vary very much as I was trying to point out a little while ago on account of the different series at which that coal is mined, whether it be in the Kootenay series, the Belly River series or the Edmonton series, but taken in those different series the quality differs somewhat as to locality, due to the pressure that has been exerted on those localities.

By Mr. Cowan:

Q. If we take the Alberta grade, Alberta and Nova Scotia coal and put them down alongside American coal coming into Quebec and Ontario our coals will stand up against them. That is the point I want to make.—A. Certainly. I do not know whether it would be advantageous here to bring out the last year before the first convention of

[Leonard E. Drummond].

the Western Canada Coal Operators and Dealers. It indicates the varying grades of coal we find in the West and the system of grading these coals. It is probably not a time for a matter of that kind to be raised. They simply indicate the various divisions in which the Western coal can be classified.

Mr. KEEFER: I think that is a detail. What we are after is where we can get coal and so forth.

By Mr. Ball:

Q. I think the quality is very important, also I think if your Western coals vary in quality, the mines which have the best coal should be developed first, because it is a very important consideration when Pennsylvania coal is brought in.

Mr. COWAN: That is why I have been trying to urge the grading, because if they had it properly graded they would not bring in coal of an inferior grade at points where it would be unprofitable to do so.

By Mr. McKenzie:

Q. Do you find the question of variation in Nova Scotia similar to the West?—A. Not at all, because they are not from the same carboniferous period.

Q. They have not any upheaval?—A. They have not the same upheaval. Some of them pitch, but they are not pitching to the same extent.

Q. Do you lay it down as a rule that Nova Scotia coals are all of the same quality?—A. They are of the same general quality of coals, coking coal, although there is considerable difference between Cape Breton, Springhill and Pictou.

Q. Are there any Nova Scotia coals that are affected by exposure any length of time? Do they disintegrate? Some we know do not. Do you know anything about that?—A. I have not been connected with that end of the business at all.

Q. Suppose we get a few ideas as to the quantities you have out there, taking Alberta, taking an output say of 20,000,000 tons a year. Supposing you got that output, how long would your coal supply last?—A. I don't think any person could tell you that, sir. The coal out there is practically unlimited, although it might be as well to point out this, if I might refer to the matter, that 25 points in the Kootenay series which have railroad transportation, that is 25 points where the railroads go through the first range of mountains, to a district at which we can attack the Kootenay series the Crow's Nest Line, the main line of the C. P. R. what is known as the Brazeau Line, the line known as the Alberta Coal Branch, and the Mountain Park line going in, and the main line of the Canadian National and Grand Trunk. There are many other points where railroad facilities could be built up. At the present time there are only five points where they are working on the Kootenay measures. The point that you raise is the development of the higher grade of coal. I think each of these mines at the present time—that not only includes the five points, but there are several points at each of those points on the railroad going through the mountains, and these points can be increased very materially but on account of the sale of that bituminous coal being more or less restricted I doubt very much whether conditions will induce much further development at the present time. For rapid quick tonnage you can secure almost an unlimited quantity of the lower grade of lignites because you can obtain them on the prairie where they are very easy of access. You go also on the Alberta Coal Branch, below what is called Mile 37, you have there the railroad for most twenty miles immediately along the outcrop of these very large seams which can be developed, and you can secure a very big tonnage in a very short time.

By the Chairman:

Q. You require an enlarged market?—A. They require an enlarged market.

[Leonard E. Drummond].

The CHAIRMAN: There are a number of manufacturers present this morning who perhaps have some practical questions they would like to ask the witness. Would the Committee be willing that any manufacturer who has any question to ask should do so through a member of the Committee?

Mr. KEEFER: Let him finish his statement first, and we would be glad to have any manufacturer ask any questions.

WITNESS: I was making some suggestion as to recommendations. If it is possible I would like to see some recommendation made that the Government co-operate to a certain extent not only with the Alberta Government but also with the operators in the West in the development of this western country. The cost of mining depends to a large extent on the initial cost of each of these mines, and going into new territory it has necessitated a great deal of prospecting work, a great deal of development work which proved more or less abortive because they were probably not placed in the most advantageous point, and we have had practically no assistance whatever in the coal mining district from the Federal Government. To a certain extent we have had assistance in a geological way, purely in a general way. During the last few years they have assisted geologically in the Crow's Nest, to a lesser extent along the main line of the C.P.R., but practically nothing has been done in the northern part of the province. The Federal Government has been securing a considerable revenue from the tonnage being produced in the Western mines, and very little assistance has been rendered. It seems to me that something might be done to help in this initial work, because after all the encouragement of those operators who are working in that district, whether it be in the north or in the south, will very materially affect the people not only of the Western country, but the central portion of Canada too.

By Mr. Chisholm:

Q. What would be the nature of the assistance you had in mind?—A. I have in mind particularly more or less thorough examination of the situation there, and assistance from time to time, recommendations and data which may assist them in securing a market and in securing comparative evidence from other fields.

By Mr. Cowan:

Q. You mean, I gather, that the geological work done has not been sufficient?—A. It has not been nearly sufficient. Take for instance in the field I have been familiar with during the last ten years,—we had to go in there with absolutely no assistance from the Federal Government, no information whatever as to the geological formation or any information from a geological standpoint, but have had to work out the details ourselves, work out the conditions and develop our mines at our own expense.

By Mr. Keefer:

Q. I believe the Geological Department was rather short-handed during the war. That is a factor in the matter. You are quite right. They are turning in now?—A. Yes.

By Mr. Cowan:

Q. Has the data been anything like accurate?—A. I believe Mr. Rose and other have done awfully good work in the Crow's Nest Pass during the last few years.

Q. As far as they have done it, it has been fairly well done?—A. Quite well done.

Q. Not enough of it?—A. Not enough of it. When I was in the Crow's Nest at the International Coal Company we had nothing practically to go on in the initial development. The Geological Survey have gone in after the development has been done, but it has been awfully good work; still it has not prevented a certain amount of loss to interests who have invested.

[Leonard E. Drummond].

Q. You said something about Federal revenue. What revenue does the Government get from those mines?—A. They secure about five cents a ton and they also secure their annual rentals. I think that is probably all I have in the way of notes.

By Mr. McKenzie:

Q. We had it before but can you give us any idea of the quantity of coal, that is anthracite, in Alberta? I mean from the information that you can gather there of what is sufficiently exposed to form a calculation as to the quantity of coal you think you have in the province?—A. It is purely an estimate. We have had quite careful estimates made for various purposes. Mr. D. D. Dowling has made estimates of the quantities of coal in Western Canada.

Q. I am only talking about Alberta now?—A. Yes, I know, Alberta. In Alberta he gives—I have some figures here before me, which I think were Mr. Dowling's figures, but they are purely estimates which he gives—1,182,000,000 tons odd of anthracite, 217,593,000,000 odd bituminous, 963,795,000,000 tons of lignite.

Mr. KEEFER: That is some coal.

Mr. MCKENZIE: We like to talk about big things.

WITNESS: In referring to anthracite, for instance, the anthracite coal is purely speculative in Alberta. What I want to bring out—

Q. The chances are you have more coal than you think you have?—A. Not only that, but I want to make it perfectly clear; it has not been perfectly clear before. The Kootenay measures when crushed sufficiently to produce an anthracite coal will also produce a friable coal and that friable coal may require to have some process in order to make it suitable for market conditions. An example of that is a bankhead where you have the coal containing about 9 to 10 per cent volatile, and the proportion of small coal mined is so great that they would not operate unless they had a briquette plant.

Q. I have only one thing more to ask you. Have you any underlying seams of coal in Alberta? One seam underlying the other, or is it continuous?—A. No, there are a great quantity of seams in each zone. I was speaking a moment ago of those hard coal seams, or semi-anthracite seams banking. We have seven or eight seams there, more than that in fact, ten or eleven seams just below one another, separated by a considerable thickness of rock, and varying to a certain extent in quality, an appreciable difference in quality, but quite noticeable, but what I wanted to bring out was that the anthracite in Alberta is due to the pressure of Kootenay coals, which are bituminous, and with that pressure the production is an anthracite coal which is friable and which may require a certain amount of briquetting or some other process to make it satisfactory to the market.

Q. When you tell this Committee that you have seven or eight or perhaps ten overlying seams of anthracite, how do you know you have that many seams? You don't see all the croppings?—A. We see all the croppings there, and they are all being mined at Bankhead.

By Mr. Keefer:

Q. They are practically on edge?—A. Practically so; the whole of the seams are all thrown up. In farther north on the Mountain Park Branch, what is known as the Cadoman Coal Company, the seam is absolutely on end; in fact it is turned over.

By Mr. McKenzie:

Q. That is not a very desirable seam to work?—A. The mining has been very cheaply done, because there was practically no mining to do.

Q. It is practically stoping?—A. It came down of itself, as long as you don't require lump coal, and mining of that character is very cheaply done, but you cannot secure domestic coal because by the time that coal arrives in the pit cars it is probably called slack. There are other mines further out on this same branch which are

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essentially domestic mines and which being vertical it is very difficult to obtain a sufficient quantity of lump coal to sell to the domestic market, that is, there is a great deal of that coal being wasted.

By Mr. Cowan:

Q. I have burnt this Bankhead coal for a year in heating air furnaces. It is almost the same as American anthracite. In fact I would rather have it than the American anthracite.—A. It is more easily kindled.

By Mr. Keefer:

Q. Have you finished your statement?—A. I think so.

By the Chairman:

Q. Do the manufacturers wish to ask some questions first?

Mr. McKENZIE: Mr. McCrea is here.

By Mr. Keefer:

Q. The question of your coal is simply one of transportation?—A. Purely one of transportation.

Q. Purely a transportation problem?—A. Yes.

Q. I would like you to just put your mind on that point for a moment. What suggestions can you give us as regards trying to get your coal into Ontario? From Montreal to Winnipeg we have in between that portion of Canada that has no coal and it has to be served either from the East or the West. What can we do about that problem?—A. As far as the coal is concerned it is entirely a question of cost.

Q. But as you say, take for instance the Canadian National lines first, the present cost over this line, (indicating on map).

The CHAIRMAN: Specify the line. The reporter has to take this. Tell what line you mean.

WITNESS: Considering the Canadian National line and considering first the bituminous coal, the distance from that bituminous field to Edmonton is about 129 miles. The distance to Winnipeg is practically 800 miles and through that distance, practically a thousand miles to the coal fields, your rate at present is \$5.50 or 5.5 mills.

By Mr. McKenzie:

Q. Is that the long ton?—A. That is the short ton, two thousand pounds.

By Mr. Keefer:

Q. That practically means on a ton of coal, \$10?—A. No, \$5.50 per ton. \$5.50 is your present rate. Now last year we had only a very small increase in our coal rates.

Q. I don't want to interrupt you, go ahead. You were going to try to help us solve this problem.—A. Your distance to the Head of the Lakes another 437 miles and go on with that determination of this distance here, Mildand is the first start off that we can displace American coal as far as Winnipeg. I don't think there is any doubt about that. We have a rate in the coal fields in Alberta, West to Vancouver, of \$3.20. That distance is 827 miles. It is a little more to Vancouver. That is due to the fact that it is over a double railway, two railways, the old Grand Trunk and the Canadian National. However, the rate over that distance was practically .4. I presume they would consider that as an economical proposition because they offered it to the coal companies.

By Mr. Douglas (Cape Breton):

Q. Who are "they"?—A. The Canadian National.

[Leonard E. Drummond].

Q. Is the C.P.R. the same in that respect?—A. No, they have not got as low a rate. The lowest rate in Canada is the rate which the Canadian National, or the old Grand Trunk, originally offered to the coal companies from this district here in Alberta.

By Mr. Ball:

Q. What point in Alberta?—A. The mines adjacent to the Canadian National, which are the Mountain Park and six or seven other mines which are situated along the coal branch.

Q. Have you no cities or towns by which you can name them, or the names of the fields?—A. It is only known as the Mountain Park district, and the Jasper Park district, and the Alberta Coal Branch.

By Mr. Keefer:

Q. If I understand the effect of your statement, it is practically this: We see no daylight in getting coal from Western Ontario?—A. What I was going to get at was that if they could see their way clear to adopt the rate which they have already granted to the West, which is one and one-half mills less than the present rate, which they adopted to Winnipeg—if that rate were adopted clear through—except in the rate we have here (indicating on map) we would have a freight rate to Toronto of seven dollars and eighty four cents.

Q. And what would the cost of the coal be? Roughly speaking?—A. The coal would be sold—

Q. F.o.b. cars?—A. F.o.b. cars, probably as low, with a little decrease in the wages, as four dollars, or possibly less.

Q. The cost of coal in Toronto would be how much?—A. Seven dollars and eighty-four cents would be the freight, provided they could use the same freight—

Q. That is the all-rail haul?—A. That is the all-rail haul.

Q. Could you cheapen it as you did the Pennsylvania coal, taking it part way by water?—A. I should think so.

Q. How much cheaper? It would just reverse the procedure?—A. It would reverse the procedure I presume. The only thing is it might not reverse very well because the main haul is down the lake.

Q. It is a matter of return cargo?—A. Yes, it is a question of the return cargo.

Q. Let us follow that up a little bit. Supposing you have a return cargo, you ought to do it for double the rate up, because they come up to-day to take the return cargo, and they have been hauling coal from Lake Erie for—A. Thirty-five cents.

Q. Well, let us say forty cents; that would be eighty cents?—A. Yes.

Q. Supposing you put your price at eighty cents, how would that affect your Toronto coal? There would be no return freight at all?—A. It would probably decrease it by one dollar and a half or two dollars.

Q. Therefore, this water transportation is vitally important?—A. Yes.

Q. Even in Toronto, in getting your western coal?—A. Yes.

Q. It would reduce the price one dollar and a half, if you took it down the water?—A. Yes.

Q. Now, I suppose one of the difficulties, if you are getting that lower freight rate by rail to the head of the lakes, is the question of the employment of the cars?—A. Yes.

Q. Having no return cargoes for them?—A. No.

Q. As they have in coal brought from Pennsylvania?—A. Yes.

Q. That is one of the reasons why the C.P.R. can economically deliver their coal to Winnipeg and elsewhere?—A. Yes.

Q. Because they have to bring their cars back to load them up with coal?—A. Yes.

[Leonard E. Drummond].

By Mr. Chisholm:

Q. What is the condition of that coal when it gets to Toronto with respect to degradation?

Mr. KEEFER: You are speaking of the western coal?

By Mr. Chisholm:

Q. The western coal. You are contemplating hauling it to Toronto. Now if you put it from the cars to the boats, and then from the vessels back into the cars, you certainly will have some degradation.

Mr. KEEFER: I think I could ask this question: Would it not be the same quality as the coal which came up the other way and handled the same way all the time?

Mr. CHISHOLM: I would like to have the witness answer that.

WITNESS: As far as degradation is concerned, we are referring to bituminous coal.

By Mr. Chisholms

Q. I thought you called that semi-anthracite coal?—A. In this district there is no anthracite coal along the Canadian National.

Q. You were referring to bituminous?—A. Yes, and consequently the degradation as far as bituminous coal is concerned is negligible because you are using similar cars anyway. As far as domestic coal is concerned, there would probably be some degradation insofar as breakage is concerned, but just to what extent that would be, it would be very difficult to determine.

By Mr. Keefer:

Q. You have that degradation in the Pennsylvania coal?—A. Yes.

Q. And you have to load it into the vessels out of the cars, and out of the vessels into the cars?—A. Yes.

Q. And you simply reverse the procedure to Toronto?—A. Yes.

Q. So you think you can see a little daylight for us there, by getting a cheaper haul to the head of the Lakes, and transporting it by water?—A. I think there would be an opportunity of transporting it certain distances, and I see a greater opportunity for the cheaper coal which I mentioned a few minutes ago, which might almost be called sub-bituminous coal, on account of its very much cheaper cost. Whether those coals would be satisfactory and adequate for your Ontario market is another point, which would have to be tried out in order to be determined.

Q. But the key of the whole problem is transportation?—A. Absolutely.

By Mr. Chisholm:

Q. Applying that rule of yours you are supposing you would get the same rate east of the Lakes that you are enjoying west of the lakes. Supposing you got these rates by rail from Nova Scotia to Toronto—what would your idea be then?—A. By rail? Well, I do not think there is very much difference, because your distance from, we will say, Sydney to Montreal, is one thousand and one miles, if I remember rightly, and your distance from Montreal to Toronto—

Mr. DOUGLAS: (Cape Breton): Was given as three hundred and thirty-three?

WITNESS: Yes, three hundred and thirty-three, that is right, about thirteen hundred miles, and the distance the other way for your coal to Toronto is practically two thousand and two hundred, so you would have the best of the rail haul.

By Mr. Keefer:

Q. Following up Mr. Chisholms' question; the Nova Scotia coal has a far better position in the problem than you have in the west, because they have practically no rail haul; they have a cheap water haul if they want to use it?—A. Yes.

Q. They can come right up to Montreal by water?—A. Yes.

[Leonard E. Drummond].

Q. The difficulty is that they cannot carry a big enough cargo?—A. Yes.

Q. How would that affect your situation, if you had to break bulk again to get to Toronto?—A. It would enhance it.

Q. As they do with the Nova Scotia coal?—A. Yes.

Mr. McKENZIES. Do not lead the witness.

Mr. KEEFER: He is our witness. We are not cross examining him.

By Mr. Keefer:

Q. So that really when you look at it, following up Mr. Chisholm's question, it is not a question of comparing the rail haul from Nova Scotia; it is a case of dealing with the water haul. What ought to be the water rate? You are an engineer and well qualified to speak—what ought to be the water rates, supposing you had a return cargo from Ontario ports to Nova Scotia?—A. I should say about sixty cents.

Q. In normal times?—A. Yes.

Q. So that you ought to be able to get the Nova Scotia coal into Ontario, if you enlarged your canal system, at a freight rate of sixty or eighty cents, or at least under a dollar?—A. I should think somewhere about a dollar depending altogether on the tonnage.

Q. So that if Nova Scotia people want to get their coal here they will have to face that question of water transportation?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. Mr. Drummond, you gave a rate over the Rockies, a distance of about eight hundred miles of four cents?—A. Yes.

Q. That is .4 of a cent per ton per mile?—A. Yes.

Q. Over the Canadian National Railway?—A. Over the old Grand Trunk Line.

Q. And over mountain country as well?—A. Yes.

Q. Well I suppose you notice in his evidence where the Grand Trunk charges themselves, or at least places an entry at any rate at half a cent a ton on the coal they carry for their own use?—A. Yes.

Q. And that the Canadian National Railways figure it out in the East at seven-tenths of a cent?—A. Well, seven-tenths is the basis upon which all coal rates were based.

Q. That is a general principle?—A. That is the general principle in the carrying out of the rates at which the coal tariff was originally carried out.

Q. And that is universal I suppose in America, is it, or is it Canadian?—A. No, I have all kinds of American rates before the last advance. I have a great number of rates before the last advance in the United States as low as $3\frac{1}{4}$ mills, that is a little over three-tenths, that is from a central competitive district to points in the middle West, and that was the reason last year in arguing this point before Mr. Carvell I could not see the object of the railroad granting us a rate to the Coast of about four-tenths, which was somewhat equal to the American rates, and that we could not secure over the Prairie District a rate equal to what had been granted to us over the Mountain Division.

Q. What was the reason given for it?—A. There was no reason given. He said that the railroads had told him they could not haul it for that rate. There was no reason given.

Q. Did the railroads say what they could haul it for? Was that gone into?—A. He intimated that there they might be able—I don't remember just exactly what their rate was. As I remember it now he said it was somewhat under half a cent a ton mile, but the exact figure I don't remember.

Q. This rate across the Rockies applies to coal the railways use for themselves?—A. It applies also to customers using it apart from the railway.

[Leonard E. Drummond].

By Mr. McKenzie:

Q. Large quantities of American coal are delivered up here at Port Arthur. Do you know anything about the rail rate if they move it West towards Winnipeg? Do you know what they charge?—A. They charge, as I remember it \$3.10 at the present time to Winnipeg. It used to be \$2.50 to Winnipeg over that 437 miles.

By Mr. Cowan:

Q. Are they charging a less rate to carry this American coal from Fort William to Winnipeg than they are charging from Winnipeg to Fort William?—A. I am not sure about that, but I know that their rate from Fort William to Winnipeg is in excess of the rate they are charging us from the West to Winnipeg, because that is one of the points I went down to see exactly what they were charging.

Mr. CHISHOLM: There is a manufacturer here.

The CHAIRMAN: Is the Committee agreed we should give the manufacturers an opportunity to ask any questions?

By Mr. Douglas (Cape Breton):

Q. I am quite agreeable, but I was going to ask a question. What is the Eastern rate. You gave that, did you? You gave the rate to the Coast from the collieries?—A. The rate from the Head of the Lakes to Winnipeg?

Q. Yes.—A. I think it is \$3.10 from the Head of the Lakes to Winnipeg.

Q. From your collieries right to say Winnipeg?—A. The rate to Winnipeg is \$5.50 from the bituminous districts. It reduces to about \$5 as you get to about the middle of the field.

Q. How does that compare with the rate when you get to the Coast?—A. It is very much more. It is 5½ mills as against about 4 mills.

By Mr. Keefer:

Q. Would you convert that rate into tons per mile?—A. It is 5.5 mills per ton mile.

Q. The other is 4?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. That is on commercial coal?—A. Yes.

Q. Can you give us the rate on commercial coal from Nova Scotia to Montreal?—A. I don't know what the rate is there.

By Mr. McKenzie:

Q. They used to carry coal from Springhill to Montreal long ago at three-tenths of a cent per ton per mile.

By Mr. McCrea:

Q. What was the cause for the lower rate on the prairie?—A. I think it was largely due to the fact that they were trying to induce Western development. Up-to-date the Grand Trunk had a more or less unremunerative system there. They were getting no West haul. They had an East haul for fish and other things, so that they were trying to induce a return haul on coal. That is what mainly induced them to give that rate.

By Mr. Cowan:

Q. You don't know whether the Canadian Manufacturers' Association has taken any active steps to try and induce their membership to use the Canadian coals up to the present time?—A. Mr. McIntyre is here to-day and he has probably take more interest than any person else in the development and making an effort to induce the manufacturers to take a more vital interest in the development of the Western country.

[Leonard E. Drummond].

Q. Mr. Cote made some reference to transporting to Winnipeg by water. Do you know anything about that? Using the river stretches and transporting in barges.—A. That would be possible all right enough from certain portions of Alberta, from Edmonton and some portions of Saskatchewan, but it is so far in advance of the present times that I have not given any thought to it at all. I only saw his evidence indicating the matter had been taken up. It has been under consideration for quite a number of years, but nothing has been done beyond the first survey.

Q. It is more an idea at present?—A. There has been nothing done yet.

Q. The ideal condition would be to haul coal by rail if it could be done. Can you suggest anything that could be done in improving your lines, improving your cars, advancing transportation generally in such a way as to enable the railways to carry coal at a reasonable cut in the present prices?—A. There is no doubt that a certain saving could be made on cars which are designed for the work of transporting coal; at the same time, from an economic standpoint, as far as the railways are concerned, they have to retain in their service a large number of boxcars for the transportation of grain, and it seems natural that these cars should be utilized during certain periods of the year to the advantage of the railroads in order to prevent congestion during the cold weather, so I cannot see they are going to change the character of their cars. We have to continue using the box car to a large extent for the transportation of coal, not only from the fact that that is a satisfactory car or the proper type of car for the transportation of grain, but also it protects the coal from the weather to a certain extent.

By Mr. Cowan:

Q. It won't deteriorate as much then?—A. No.

Mr. McKENZIE: That is the proper word. I am glad you are coming to it. "Deterioration" is the right word. You are all calling it "degradation".

The CHAIRMAN: We are within five minutes of adjournment. If Mr. McIntyre has any questions to ask we will be glad to hear them.

Mr. McINTYRE: The only questions I have to ask practically have been asked by the different members of the Committee, and the answers I wanted to bring out definitely were the difference between the freight rate coming from the Edmonton district to Winnipeg, compared with those over the Mountains and also what was the difference between Western Canadian coal going from the Head of the Lakes, as compared with the freight rate from the Head of the Lakes West. I understood there was quite a difference there at one time.

By Mr. McIntyre:

Q. (continuing) If you will allow one general statement made by Dr McCallum a few years ago where he said it would be necessary for the province of Manitoba alone to scrap forty thousand furnaces if Alberta coal were used—if they were compelled to use western coal. I would like that question to be settled, because I think it is very important, if we in Ontario are looking for Western coal—it is important to know if by using that western coal we would be compelled to scrap our furnaces.

By Mr. Keefer:

Q. What about that? You could use the ordinary furnaces? You could use them for the use of your domestic coal?—A. Absolutely so.

Q. I have been doing it last winter without trouble.—A. No trouble whatever.

Q. And using your coal.—A. Yes.

Q. We found it satisfactory.—A. Yes.

Q. It is purely a question of transportation? You cannot get away from that point.—A. One of your representatives in Port Arthur, wrote to me, and I am to see him on my return on that very point—one of your American representatives.

[Leonard E. Drummond].

Q. It is just as you pointed out, purely a question of freight rates?—A. Yes.

The CHAIRMAN: Are they any further questions?

Mr. DOUGLAS (Cape Breton): Was the witness giving a denial of the statement that is necessary to scrap the furnaces?

WITNESS: There is no difficulty whatever in using western coal in any of the furnaces; the only thing is that the western coal makes a little more gas and is probably not quite as satisfactory in a very small fire box, if it is carried to extremes as it is in some cases, but there is no reason why the western free-burning coals should not be absolutely satisfactory for domestic purposes.

By the Chairman:

Q. You are referring to what you term "domestic coals" out there?—A. Yes.

Q. That does not apply to all western coals?—A. It does not.

Mr. COWAN: I think that should be emphasized. I think it is very well taken, because it looks to me as if the province of Ontario were unnecessarily alarmed in thinking that it will be necessary for them to scrap their furnaces. I think it is absurd.

The CHAIRMAN: The hour of adjournment is here. Have you any other questions, Mr. McIntyre?

Mr. McINTYRE: Yes.

By Mr. McIntyre:

Q. Will the continuation of production materially reduce the cost of production? That is, may we expect a reduced cost at the time? Would the enlarged market for Alberta coal give a continuation of operations, and will that not promise a very great reduction in the price of coal at the mines?—A. The increased production, of course, will reduce the cost of mining, and anything which will assist in obtaining steady operations in mining will reduce the cost.

By Mr. Keefer:

Q. Mr. Drummond, do I understand you correctly when you informed us that in the West you have large deposits of coal fit for domestic consumption which is practically a steam-shovel proposition?—A. Yes, it has yet to be proven just what proportion of that coal will be of a commercial size. In any big proposition of that kind the amount of fine coal will be in excess of the enterprise where they are doing true mining under the ground, under ordinary mining conditions. There is no doubt that coal will be satisfactory for domestic use. It is entirely a matter of the proportion of the lump coal which can be secured in that class of mining operation.

The CHAIRMAN: Mr. McKenzie has a question to ask the witness.

By Mr. McKenzie:

Q. In Nova Scotia we have a great deal of trouble in getting contracts made with the National Railways. They seem to hold back and gee and haw about making the contracts with us. What is your experience with the coal operators in the West in that regard?—A. In the past there has been little or no difficulty in arranging the contracts; the negotiations have been protracted to a certain extent, but we consider that the delay was a natural wish to obtain the lowest possible price for the commodities. I do not think it was unnecessarily so.

Q. Do you find any playing of your mines against the American operators?—A. They tell us they are doing that.

By the Chairman:

Q. You get the contracts when the price is satisfactory to the railway company?—A. Yes.

[Leonard E. Drummond].

The CHAIRMAN: Any further question.

Mr. DOUGLAS (Cape Breton): Mr. Chairman, Mr. Drummond has given us very valuable evidence, and it occurs to me that perhaps he will not be returning for a day or so. We might have some other questions to ask him.

WITNESS: If there is anything, I would be glad to remain over.

The CHAIRMAN: We have a very full programme for to-morrow and Friday, and we have no session on Thursday.

Mr. DOUGLAS (Cape Breton): I simply made this as a suggestion in regard to a valuable witness.

The CHAIRMAN: I would be very glad to do that, but I do not know when we can give further time to Mr. Drummond, unless some witness we have called for to-morrow or Friday should disappoint us. While I know we would be glad to hear from him further, we cannot very well upset our whole programme.

Mr. DOUGLAS (Cape Breton): That is right.

Mr. KEEFER: May I ask before we adjourn what steps are being taken in regard to furnishing us with the costs sheets from these mines.

The CHAIRMAN: We will come to that now.

Mr. CHISHOLM: Mr. Chairman, I wish to make a motion. The labour people of my county wish to be heard before the Committee, and I make the motion that we accede to their demand.

Mr. DOUGLAS (Cape Breton): I second that motion. It has been done in one field in Cape Breton, and I do not think Mr. Chisholm's motion is unreasonable.

Mr. MCKENZIE: Is it not possible for the men who are coming here to represent the labour people of Nova Scotia—all of them?

Mr. CHISHOLM: No, there are peculiar conditions in the western part of the island, and I want to see the labour people represented here.

The CHAIRMAN: May I point out that the Committee has been endeavouring to arrange a programme that meets with the requests of the members of the Committee, that certain labour representatives be heard—I do not know where they are coming from; but I think it was the general feeling of the Committee that if we heard one delegation of labour representatives from the east, that would be sufficient. Now, the Committee will be up against this difficulty, that when you begin opening the door for labour representatives, you will have requests from all parts of the country which you cannot refuse. I am subject to the will of the Committee, but that is my own view.

Mr. CHISHOLM: You have sent for three labour men from Eastern Cape Breton, and I move that the labour men from Western Cape Breton be represented, and their views offered.

The CHAIRMAN: Mr. Chisholm moves that the Committee invite labour representatives from Western Cape Breton—

Mr. DOUGLAS (Cape Breton): The motion was for one representative.

The CHAIRMAN: Well, for one representative from the Inverness field—that a representative of the labour interests there be asked to appear before the Committee.

Mr. MCKENZIE: Before putting that motion, I would like to ask if he would be able to appear here with the others.

Mr. KEEFER: Where are the three coming from?

The CHAIRMAN: Eastern Cape Breton. I think I will speak plainly on this. We must get away from this local feeling and the trying to serve local interests in this Committee. We have much bigger work than that, and I do not think at all we should begin calling the labour representatives from the local fields, unless we are prepared to go into the labour situation throughout the whole of Canada.

[Leonard E. Drummond].

Mr. CHISHOLM: Mr. Chairman, do you not think that my demand is reasonable? You wanted three men from another field, and there was no objection to that.

Mr. KEEFER: I think we erred in doing that.

Mr. BALL: That was a mistake.

Mr. KEEFER: I think we erred in that, and if we did err, how far are we going to continue to err? There are three on the way now from Nova Scotia.

The CHAIRMAN: Yes, we have summoned three for Friday; they left there on Monday night.

Mr. KEEFER: Well, now then, Mr. Chisholm wants to have one come from Inverness, is it?

Mr. CHISHOLM: Yes, Inverness coal fields.

Mr. KEEFER: Is there any other district wanting to get one or two? The Western people want to get some.

Mr. MCKENZIE: Pictou and Springhill.

Mr. DOUGLAS (Cape Breton): The three representatives that are coming, the President of the United Mine Workers and the Secretary, and the board member, and generally speaking their jurisdiction extends all over Nova Scotia, but in the case of the Inverness, according to what appeared by the evidence, there are conditions that exist there different from most of the other fields of Nova Scotia. While I think the three men that are coming generally may cover the situation in Nova Scotia, I think the one man from Inverness might supplement the additional information that might be required to be brought out, and I don't think it would necessarily open the door for other people to be called from Inverness coal fields, and I don't expect it.

Mr. CHISHOLM: Our condition is unique.

The CHAIRMAN: So is the condition in every local situation. In what way?

Mr. CHISHOLM: With respect to complicated conditions down there between miner and mine owners.

Mr. KEEFER: Does it affect the question of production?

Mr. CHISHOLM: Certainly it does, and that is the reason I want to have them here.

Mr. KEEFER: If any member of the Committee says it affects the question of production, I think we ought to have them here.

Mr. COWAN: We want the mine workers competent to speak on that. I don't understand the local conditions.

Mr. KEEFER: All this is going down. Do you want it down?

The CHAIRMAN: Yes. My feeling is that only any witness who can give us evidence that is valuable to the question as a whole which we are investigating, it is quite proper to have him. But if a witness is coming here to give us information on some local condition I don't think the Committee is justified in taking up time, because we are going to discard some of the subjects we would like to consider.

Mr. COWAN: I am willing to support this motion on the condition that this is all we are going to call from Eastern Canada. I don't want to double up expense on the Government.

The CHAIRMAN: Is the Committee ready for the question?

Mr. COWAN: Is that the understanding, that there are going to be no more allowed from Eastern Canada? Is that going to be understood?

Mr. DOUGLAS (Cape Breton): I think these four men should cover the situation.

Mr. COWAN: I am not going to vote for a whole lot of expense more than we need.

[Leonard E. Drummond].

The CHAIRMAN: I cannot imagine what other information the witnesses coming from Inverness can give the Committee. I mean as to evidence on the question which we are considering. Are you prepared to vote on the motion?

The motion was put to the Committee and declared carried.

Mr. KEEFER: When shall we have this witness?

The CHAIRMAN: Whenever it will suit your programme. We have a programme prepared for this week and next week.

Mr. KEEFER: Will you tell us what the programme is?

The CHAIRMAN: To-morrow we have Mr. Britt, General Fuel Purchasing Agent of the C.P.R., Mr. Price, General Manager of Eastern Lines; on Friday we have the labour representatives from Cape Breton. We outlined yesterday what we would like to get next week. I am sorry I have not got it here with me. We have written to most of the parties asking them to come here on those days. We have not heard from them yet. On Monday we have water transportation. Then we take up the substitutes for coal.

Mr. KEEFER: When are we going to get the cost sheets in?

The CHAIRMAN: Do you wish the letters read?

(The following letters and telegram were read):

OTTAWA, April 29, 1921.

"Roy M. Wolvin, Esq.,
President, Dominion Coal Co.,
Montreal, Que.

"Sir,—By direction of the Fuel Committee of the House of Commons, I am transmitting a copy of a motion adopted by said Committee at a meeting held on Thursday, April 21. The motion reads as follows:—

"That Coal Operators called as witnesses by this Committee, be obliged to furnish the Committee with detailed monthly statements from 1912 to date, of the cost of production of coal per ton, showing thereon all items separately entering into said cost. Said statement be certified by their auditors."

At a meeting held on Thursday, April 26, the Committee made the above motion more explicit by resolving thus:—

"That the auditors of all coal companies appearing before the Committee do personally attend with the original cost sheets mentioned in the resolution of April 21, for the purpose of examination thereon."

Please be good enough to inform me by wire on what day the auditors will be able to appear in person before the Committee with original papers and questions.

Respectfully,

Clerk, Fuel Committee."

MONTREAL, April 30, 1921.

"The Clerk, Fuel Committee,
House of Commons,
Ottawa, Ont.

DEAR SIR,—

Your letter of April 29th, is received, forwarding copy of the resolution of the Committee relative to our auditors personally appearing with the original cost sheets.

Do you mean by this, our auditors, such as Price Waterhouse and Company, who make the audit of our company's accounts.

Yours very truly,

(Signed) R. M. WOLVIN,
President."

HOUSE OF COMMONS,

May 2nd, 1921.

"Roy M. Wolvin,
President, Dominion Coal Co., Ltd.,
Montreal, Que.

"Not Price Waterhouse & Co., but R. Gordon, Controller, (Auditor), Dominion Coal Company.

(Signed) THOMAS S. HOWE,
Clerk, Fuel Committee."

Mr. KEEFER: When was that telegram sent?

The CHAIRMAN: Yesterday.

Mr. KEEFER: It is a very easy matter to delay this matter. I think we should hold them up to it promptly, that is if we intend to have them here.

Mr. McKENZIE: Let us name a day when we want them here. We can send them a telegram saying the Committee will hear your auditors on a certain day.

Mr. KEEFER: That is a good idea, a very good idea.

The CHAIRMAN: What day will you say?

Mr. KEEFER: Some day next week to give them plenty of time.

Mr. CHISHOLM: I think you have your programme filled for next week.

Mr. KEEFER: What have we got from Wednesday on in the next week?

The CHAIRMAN: I might say I wrote personally to every party who was interested. Some of them may not be able to come on the days on which we asked them.

Mr. KEEFER: How would it be to take a pitch at it, and say next Wednesday, a week from to-morrow?

Mr. McKENZIE: There are two companies particularly, the Dominion Coal Company, and the Dominion Steel Company, Mr. McDougall and Mr. Wolvin, you wanted a statement of each of these companies.

Mr. KEEFER: This is Tuesday. I would suggest that you fix next Wednesday—a week from to-morrow.

The CHAIRMAN: And cancel the programme as arranged. That will be May 11th.

Mr. KEEFER: I think they should be telegraphed to previous to that date, as Mr. McKenzie suggests, and asked to reply to us.

Mr. DOUGLAS (Cape Breton): That applies to the Nova Scotia Coal Company and the Dominion Steel and Coal Company?

The CHAIRMAN: Is there any other business to bring before the Committee this morning? If not, the Committee stands adjourned until 10.30 to-morrow morning.

The Committee adjourned until Wednesday May 4th, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM No. 425,

WEDNESDAY, May 4, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future Fuel Supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will the Committee come to order. Now we have as witnesses to-day two representatives of the Canadian Pacific Railway. We will first call Mr. Britt, the General Fuel Agent of that railway.

Mr. THOMAS BRITT called, sworn and examined.

By the Chairman:

Q. What is your official position, Mr. Britt, in connection with the railway?—
A. General Fuel Agent.

Q. How long have you held that position?—A. I have been connected with the Fuel Department for thirty years. Actively in charge for thirteen years.

Q. What are your duties, speaking generally?—A. Purchasing, distribution and account.

Q. Of fuel?—A. Yes, fuel only.

By Mr. Maharg:

Q. Over the whole system?—A. No, actively as far west as Fort William. West of Fort William is taken care of locally from the Winnipeg office, although I do take care of the coal that is forwarded from the East to Fort William.

By Mr. Cowan:

Q. That is forwarded from the East to Fort William?—A. Yes, that is Lake Erie coal.

By the Chairman:

Q. When you speak of fuel do you use any fuel on the railway except coal?—
A. Yes, we use fuel oil on the British Columbia district.

By Mr. Cowan:

Q. Where do you get that from?—A. From California by water to Vancouver.

Q. I suppose where you use it it is because it is cheaper than coal?—A. Not together, sir as far as I know. It was originally brought about for the protection of the forests in the Rocky Mountains, that is to avoid the spark.

By the Chairman:

Q. About how much coal do you use on the railway every year? Have you any statement to make?—A. No, I have no statement. I brought a few memoranda. Our consumption in 1920 was 4,072,582 tons of bituminous coal.

By Mr. Cowan:

Q. That is for your whole system?—A. That is for our whole system, and in addition we used 1,110,688 barrels of fuel oil.

[Thos. Britt.]

Q. That does not include your American connections at all, just the Canadian Pacific?—A. Just the Canadian Pacific. The American connections are handled absolutely separate with their own organization. Now, that consumption of coal was divided into Eastern lines and Western lines, that is East and West of Fort William. The lines East used 2,154,553 tons and the lines West 1,918,029, and in addition, of course, the oil all belongs to the Western lines in British Columbia. There is no oil on the Eastern lines to any extent. Of that consumption on Eastern lines there were 111,000 tons used on lines in the States, that is, our Eastern lines going through the American territory. For instance, in Maine and through the state of Vermont.

By the Chairman:

Q. That was all bituminous coal?—A. That was all bituminous coal.

Q. Do you purchase any anthracite at all?—A. To a very limited extent. The only anthracite we are using to-day practically is for our coaches, the Baker heaters. We have been for several years past taking care of our station requirements with coke, gas house coke.

By Mr. Cowan:

Q. Where do you get that coke?—A. Principally from the Montreal Light, Heat & Power Company.

Q. That coal you send into the West, 1,000,000 tons, where do you get that? Where does that come from?—A. Lake Erie. The different ports on Lake Erie.

Q. How far west do you ship that for use on the C.P.R.?—A. I might say it does not go west of Brandon or Broadview.

By the Chairman:

Q. Just tell us generally the source of your supply. You have told us the amount of your consumption, the amount on Eastern lines and the amount on Western lines. Now give us the source of the supply?—A. Well, I better start, I suppose, from the extreme East, the eastern end of our line, that is down in New Brunswick and Nova Scotia, is taken care of with Nova Scotia coal, and also with coal from New Brunswick. When we come to the state of Maine, we use American coal and we have been at the present time using American coal for the balance of the system, I might say.

Q. Can you give us the amount of the Maritime Provinces coal purchased?—A. I can give you the Canadian coal consumed last year. Out of our last year's consumption there were 1,370,000 tons of Canadian coal.

By Mr. Douglas (Cape Breton):

Q. What was the total?—A. The total was 4,072,000 tons in Canada, which will also include our lines in the state of Maine.

Q. The amount of the Maritime Provinces coal was what?—A. The way I put it was this way, the Canadian coal consumed in New Brunswick, that is the New Brunswick district, that would take from St. John through to Lake Megantic.

By Mr. Cowan:

Q. Where on earth is that?—A. Megantic?

Q. It is in the province of Quebec?—A. Yes, below Sherbrooke. New Brunswick district consumed 150,000 tons; Manitoba district 70,000 tons; Saskatchewan 390,000 tons; Alberta, 578,000 tons, and British Columbia, 182,000 tons. That is a total of 1,370,000 tons of Canadian coal consumed.

[Thos. Britt.]

By Mr. Douglas (Cape Breton):

Q. You have not included the C.P.R. line in Nova Scotia in that?—A. The Dominion Atlantic?

Q. Yes.—A. That is run under a separate organization altogether. They are absolutely separate from us.

Q. That is not purchased through the C.P.R.?—A. No, they have local autonomy down there. They do their own purchasing, distribution and everything else.

Q. That is a subsidiary of the C.P.R.?—A. Yes, but their organization is entirely separate.

Q. I suppose there are some other lines in a similar position, are there?—A. The Quebec Central is.

Q. Have you any idea of the quantity each of those lines use?—A. Since the war came on, when the situation became acute I was not buying the bulk of the Quebec Central coal for them. Their consumption runs about 50,000 to 60,000 tons a year.

Q. And the D.A.R.?—A. I do know they buy all their coal locally. Incidentally they have had their price raised on them this spring.

Q. You don't know what the price is, I suppose?—A. They raised their price from \$6.25 to \$6.50.

Q. You have not had your price raised?—A. I have not any price to work on. I have got Nova Scotia.

Q. Delivered where?—A. On car.

Q. Where?—A. At Stellarton. I think Stellarton is the Acadia delivery point. If I remember right they were paying \$6.25, and they were raised in the last contract to \$6.50.

By Mr. Cowan:

Q. Have you had the price raised on you for the American coal you are buying?—A. This year I might say I have not made a solitary contract for coal of any kind so far.

By Mr. Douglas (Cape Breton):

Q. Why?—A. Because I can buy it to better advantage in the open market, and we are well protected by considerable coal on the ground that costs us considerable money and I figure I am going to make that coal earn some money for us, so instead of entering into a contract on the higher price I am depending on the market. So far I have done exceedingly well.

Q. That would be the American market?—A. Yes. There is really no spot coal in the Canadian market. That 150,000 tons in New Brunswick is practically Nova Scotia and New Brunswick coal. The rest of it is all used in Western Canada, and it is all practically from the Crow's Nest Branch, in Canmore and that district.

By Mr. Cowan:

Q. Do you own any of your own mines out there?—A. No.

Q. I thought you owned a mine at Bankhead?—A. That is hard coal.

Q. Do you own any mines through subsidiary companies?—A. There is a subsidiary company, I understand, the Gault Company at Lethbridge, but that is practically all domestic fuel.

Q. You don't own any mines in the States?—A. We have an interest, not a controlling interest, in one property, and we secured that for our protection.

By Mr. Douglas (Cape Breton):

Q. Do you get much coal from that property?—A. We get all we require for Lake Erie, and for the province of Ontario. In other words, it is a backlock for us to help us and give us the preference. They give us preference in the supply when

[Thos. Britt.]

we require it, and they give us preference in the buying, but we don't control the property.

Q. About what proportion of your American coal did you buy from other lines?

—A. I would say I thought possibly half, from memory. I would say in the last year we could not get from them—although they gave us all their output—we could not get from them half the coal we required for our lake shipments. Our supply went to pieces, and as I say they gave us all their output, but they did not give anywhere near the supply to meet our requirements.

By Mr. McKenzie:

Q. The 150,000 tons you consumed in Nova Scotia and New Brunswick, is that the total consumption there?—A. No, we had to put American coal in last year.

Q. Why?—A. We could not get any Nova Scotia coal.

Q. Why?—A. They did not have it, they claimed.

Q. Was not the difference between you in price?—A. Oh, no. We paid anything they demanded.

By Mr. Cowan:

Q. You paid what?—A. We paid all they demanded. For bituminous coal by water, delivered at St. John, we started off in January, \$6.75; February to April, \$7; May to August, \$8.50; August to December, \$9, so you see we were very, very generous. We simply gave them whatever they asked for, although they did in December ask for \$11.

By Mr. Douglas (Cape Breton):

Q. Which you did not give them?—A. Which we did not give them, nor we would not give them on account of the American coal prices dropping. We could put American coal by water in cheaper and they very graciously condescended to knock off that \$2.

Q. That was for railroad purposes?—A. That was for railroad purposes. That is on the car at St. John. We did also get some rail coal from them from Springhill, which I might say is a great condescension for them to give the C.P.R. Springhill coal. That belongs to another railway in the vicinity. It was as an extreme favour that we got it, after begging them. In February they charged us \$5.60 on the car at the mines; in August, \$6; August to November, \$6.50, and December, \$7.50. Now to come back to the \$6.75—

By the Chairman:

Q. That is for what?—A. That is for coal on the cars at Springhill.

By Mr. Douglas (Cape Breton):

Q. Springhill or Springhill Junction?—A. Springhill Junction, I would say, the freight is from Springhill Junction to St. John, \$1.55 in addition to the prices here.

By Mr. Chisholm:

Q. Is that a long ton?—A. That is a short ton.

Q. Your company is quite willing to use more Nova Scotia coal if you could get it?—A. I would like to say right here in connection with Nova Scotia coal, that Nova Scotia coal when coal is plentiful is all right, but in times of stress it is not much good.

By Mr. Cowan:

Q. What is the difference?—A. Because it does not come through.

Q. What do you mean by that?—A. It is confiscated.

[Thos. Britt.]

Q. By whom?—A. Connecting railroads.

Q. That is not anything against the coal. The coal is good enough?—A. I am referring to reliability of the supply. That is why we depend more on water shipments.

Q. That is a thing that is becoming more complicated every day. It looks to me as if there was something wrong down in Nova Scotia. I don't know what it is, and I want to find out.

By the Chairman:

Q. Will you explain that to us?—A. I will explain that to you in this way: If we make a contract for rail coal down there, if the coal is plentiful it will come through but if coal is scarce other railroads take it and they tell you they have priority rights to the coal in Nova Scotia. I have been told that frankly.

By Mr. Cowan:

Q. There is no real inducement for you to deal with those companies down there?—A. Not for rail shipments. Water shipment is controlled by the Dominion Coal Company. They ship it and handle it, but as far as rail coal to us is concerned it is not reliable.

By Mr. Douglas (Cape Breton):

Q. So in point of fact the coal industry in Nova Scotia as far as the purchase by the C.P.R. is concerned your road is handicapped.—A. To that extent I have explained there. I would hesitate to-day to make a contract with any Nova Scotia firm for rail coal for a year. Conditions are easier to-day. They may change before the winter.

By Mr. Cowan:

Q. How do these other railroads get prior rights? Have they any interest in the company?—A. No, they simply take it. Needs must.

By Mr. Chisholm:

Q. That is the other railways, the Government railways?

By Mr. Douglas (Cape Breton):

Q. The Canadian National Railways?—A. Yes, they don't take it all the time, but when coal is plentiful it will come through, but I am speaking of the time of stress when coal is scarce, your contract is no use to you. One of the last actions of Mr. Magrath was to settle a big dispute we had for a lot of that coal that was taken while the order was placed at the mines: "You must give the coal to us and not to the C.P.R." The miner says, "I have a contract with the C.P.R. You can take it at your own risk if you want to." And they took it.

By Mr. McKenzie:

Q. Did not these things happen to you during the war?—A. Yes, and they have happened since the war, not to the same extent.

Q. Before the war you never had any trouble of that kind with the Nova Scotia coal?—A. Nova Scotia came principally through to us by water.

Q. Whether water or rail, before the war you had no confiscations of that kind?—A. No. As I say, we had very little rail; it was practically all water.

Q. Whether it was or not, it never happened before the war?—A. No.

By Mr. Cowan:

Q. If it came by water the railway companies could not confiscate it?—A. No.

[Thos. Britt.]

By Mr. McKenzie:

Q. You know a great many things were disarranged and in desperate condition during the war, and things were happening that never happened before?—A. Yes, but the railroads had to operate and if the coal was taken by means of transportation, why take another company's coal?

By Mr. Douglas (Cape Breton):

Q. It was not the fault of the mine owner?—A. No, I am not attributing any fault to the mine owner.

Q. The fault is with the railway?—A. Yes. Things may be very easy to-day. I say in the spring of 1919 conditions were easy, but in September and October you could not get coal.

Q. So that you are afraid to make contracts in Nova Scotia for that reason?—A. I hesitate to do it.

By Mr. Cowan:

Q. You could get a lot of this coal by water to Montreal and St. John? What reason have you for not doing it?—A. For the reason I have not got any prices from the Dominion Coal Company for this year's business.

Q. Have you asked for them?—A. I have asked for it and was told the information would be furnished this week.

Q. That looks as though they were a pretty slow outfit in looking after contracts?—A. They know we are more or less handicapped down there. They are really the only ones that can supply us coal in that territory.

By Mr. Douglas (Cape Breton):

Q. It would be a fair conclusion to make that one reason why the mines are not working steadily in Nova Scotia and in Cape Breton is because of the policy of the C.N.R. in confiscating coal that might be consigned to your company?—A. I would not put it as strong as that. One of the reasons to-day of course is our very very low consumption. Our traffic has fallen off and our consumption is very low. We had been taking our current requirements from them up to the first of May.

By Mr. Maharg:

Q. Do those other railway companies take your coal from you without an order from the Fuel Controller?—A. There is no necessity for it now, but when they did take it—

Q. Without an order from the Fuel Controller?—A. I believe so.

By Mr. Cowan:

Q. The railways all have that right, for instance, as I understand it, out West if there is a carload or a load of coal consigned to any dealer, if the C.P.R. finds they are in need of coal they will take the coal?—A. I cannot say so much about the West, but I do know during the period of the war to the close the Canadian Pacific Railway did not confiscate twenty-five cars of coal and what cars it did confiscate we offered to return in ten days and those, probably twenty-five cars, were not confiscated owing to short supply but due to the fact of snow blockades, but twenty-five cars was the sum total of confiscations east of Fort William during the whole period of the war. We prefer to buy our own coal and pay for it excess prices rather than interfere with the commercial coal.

Q. Have you been getting any of this coal delivered in years gone by by water at Montreal?—A. We have had nothing since 1916. In 1912 at Montreal and Quebec we had 527,000 tons. In 1913, 515,000 tons; in 1914 possibly 500,000 tons; in 1915, 390,000 tons.

[Thos. Britt.]

By Mr. Keefer:

Q. Can you give the relative prices for these?—A. Yes, I can give you the prices. 1916, 112,000 tons; 1917, at Quebec only, 22,000 tons. There was no coal came to us beyond Quebec that year. They did not have it for us. In 1916, we only got a limited quantity.

By Mr. Cowan:

Q. There is a tremendous drop in the price of coal that was consumed by you by water?—A. That is the coal received from the Dominion Coal Company during those years.

Q. You are not receiving now any at all?—A. No.

Q. 1917 was the last?—A. Yes, that was at Quebec.

By Mr. Keefer:

Q. What were the prices?—A. Montreal prices per net ton on the car. 1912, $2.61\frac{1}{4}$; 1913, \$2.61 $\frac{1}{4}$; 1914, \$2.68; 1915, \$2.68; 1916, \$3.35. Now the Quebec prices have been approximately always 25 to 30 cents a ton higher than Montreal.

Q. It was freighted up by water?—A. By water delivered on cars on our own racks.

By Mr. Douglas (Cape Breton):

Q. The short ton?—A. All these figures I quote there are short ton. The coal in 1917 in Quebec was \$6.70.

By Mr. Cowan:

Q. Is the big increase in price the reason you are not getting it that way now?—A. There was no coal of any account available in 1918 and 1919.

Q. You have not got any prices from them at all for delivery?—A. Yes, I have price this year. They offer 100,000 tons at \$8.10.

By Mr. Douglas (Cape Breton):

Q. Where?—A. On cars, Montreal.

By Mr. Keefer:

Q. Can you explain the difference between 1914 and 1920?—A. I cannot say as to what the difference is. It is all put down in the cost of production. At one time we had a fairly good idea of the cost of production, but for years past that cost has ceased to be a factor.

Q. When did you have that cost of production?—A. In 1911 and 1912.

Q. What was it then?

By Mr. Cowan:

Q. It would be under \$2.61 anyhow.—A. Yes.

Q. Do you know what the freight was by water?—A. They used to give us a delivered price. It would run about 50 to 60 cents. That is what I think they figured their boat rate and their handling. That, of course, they would keep to themselves pretty well. It is their own business.

By Mr. Douglas (Cape Breton):

Q. What prices were you given this year on Nova Scotia coal by water?—A. Our purchases this year are going to be light on account of the great falling off in traffic. We have considerable coal on the ground and they have offered us 100,000 tons at \$3.10, and I can to-day put down better coal in Montreal at \$7.50, American coal.

[Thos. Britt.]

By Mr. Keefer:

Q. Where do you bring that coal from?—A. From the Clearfield region in Pennsylvania; from around West Virginia.

Q. How do you bring that coal in?—A. All rail.

Q. You can lay it in there all rail at \$7.50?—A. That would include the duty and the exchange.

Q. Have you been taking any in by water?—A. No, none at all.

By Mr. Douglas (Cape Breton):

Q. How do you get your West Virginia coal in?—A. Rail.

By Mr. Cowan:

Q. What is the rate there? We want to get the cost of producing that coal on the American side rather than down in Nova Scotia, what they claim the cost of production is?—A. Cost at the mines, \$2.25.

Q. That is the spot coal?—A. Don't confuse this distress coal with spot coal. Some of the witnesses have been putting the two together.

By Mr. Keefer:

Q. Explain the difference please?—A. Distress coal is that in anticipation of a shortage coal is put in storage or on wheels under demurrage, which has to be disposed of.

Q. Or pay demurrage?—A. Yes. It is only a question of time when the demurrage eats up the value of the coal and you are left with nothing. On the other hand mine owners that are busy rather than lose it will sacrifice a profit on part of their output in order to keep their mines in operation.

By Mr. Douglas (Cape Breton):

Q. That would be spot coal?—A. That would be spot coal. What I would call spot coal to be shipped after the order has been placed.

By Mr. Cowan:

Q. You may be able to get it and you may not?—A. You have to take a chance of getting enough to go along with.

By Mr. Keefer:

Q. This price is spot coal?—A. Yes, it is coal that is shipped after you give the order.

Q. The price is what?—A. \$2.25 at the mines.

Q. That would not be a fair criterion to take?—A. I have been offered contract coal at \$2.75.

By Mr. Douglas (Cape Breton):

Q. Take contract coal. What is your freight rate?—A. It varies from \$2.75 to \$3, according to who owns the coal.

By Mr. Keefer:

Q. Give us the difference in cost to get to Montreal?—A. \$2.75 is on the C.P.R. rails. It would not include the C.P.R. charges in their terminals. That is, foreign freight up to the C.P.R. lines, connecting roads, \$3.71.

Q. What should be added to an ordinary dealer bringing the coal in?—A. I think it is 80 cents a ton for movement, that is, switching. That would include the movement in the terminals to their siding, or wherever the coal was required.

[Thos. Britt.]

Q. What is the next item?—A. That would be approximately 12 per cent. It would be about \$7.70.

Q. What are the additional charges?—A. Duty 53 cents.

Q. Anything for insurance?—A. Not on rail coal.

Q. That makes a total of what?—A. \$7.70.

Q. Have you never tried to bring it by water to save that heavy expense of rail haul?—A. That is a cheaper route than water.

Q. How comes that?—A. Water is a combination of rail and water and then you have your discharge, your handling at the terminal.

Q. The water was used to a greater extent during the war owing to the scarcity of rail equipment. You could not get coal through the American side in cars?—A. No.

Q. What is the American rate?—A. \$1.81 and \$1.95.

Q. What is the water rate from there down?—A. This year I understand it has dropped to \$2.22.

Q. That is affected by the size of the carrier?—A. They are all canal draft boats.

Q. You are taking that same coal up to the head of the lakes at what price?—A. Fifty cents or less.

Q. Why the difference between \$2.25 and 50 cents. Up to the head of the lakes it is twice the distance to Montreal. Why the difference?—A. First of all, your down river is governed by the size of your carrier. Another thing, your carrier is limited to a canal draft. You take a boat on Lake Ontario, she will carry 3,200 or 3,300 tons. The best of those carriers coming down, canal draft, will only carry 2,200 or 2,300 tons. A lot of them will do worse than that.

Q. The difficulty is the canal carriage?—A. Yes.

Q. If that canal carriage was improved you would increase the rate?—A. I think they used to carry that coal for 90 cents.

Q. From where?—A. From Lake Erie to Montreal.

Q. At that time you were carrying it up to Port Arthur and Fort William for 30 cents?—A. Yes.

Q. It is almost three times more?—A. Yes, they pretty much figure their rate here on what they can get for their commodities.

Q. It is a fact that the freight rate on the coal from Lake Erie is very largely affected by the canal question?—A. There is also another question, the return cargo.

Q. As regards return cargo, are there any return cargoes out of Montreal going West by Water?—A. Not to any extent. There are some boats go down below Montreal for pulpwood.

Q. There is quite a bit of pulpwood?—A. Coming back.

Q. Is there any large package freight, or do you haul it all by rail?—A. I do know that all the coal carriers practically go back empty.

Q. We will leave the question. The idea is that canal carriage is increasing the cost of freighting the coal to Montreal, as we have had it from other witnesses, by \$1.50 a ton. If you had a big carrier carrying eight or ten thousand tons cargo you should be able to get that down to Montreal at 75 cents easily?—A. No, I would not say that.

Q. How much?—A. For instance, an Upper Lake boat is running at 40 or 50 cents a ton, the chances are he has a down cargo at double the price.

Q. He gets a return cargo. I have an idea of that here. Take when coal rates ran in 1911, 30 and 40 cents, in 1919, iron ore ran from 60 cents to a dollar and then she has the grain in the fall.

Q. Supposing she came to Montreal and went back light, charging up the freight rate both ways it would not be more than 90 cents?—A. There is another factor. Take in the grain carrying season a nine thousand ton boat will go up there with coal at 40 or 50 cents. She earns \$4,500. She comes down with grain. I am giving you the different phases why, so far as the rail shipment is concerned, it is all a foreign shipment. On that figure to Montreal it is all paid to foreign Companies. We don't earn anything on that.

[Thos. Britt.]

Q. Take your coal for your ships. Where do you get your coal for these vessels on the lake service?—A. Port McNichol.

Q. How do you get your coal to Port McNichol?—A. By self-unloading boats to Lake Erie.

Q. You bring it to Port McNichol?—A. Yes.

Q. At what rate?—A. About a dollar. That includes discharge.

Q. How much farther is it to Port McNichol than it would be to Montreal by water? It would be twice the distance, would it not, around through Lake Erie, river St. Clair, the Detroit river and Georgian bay. The other way it is down Lake Ontario and down the St. Lawrence?—A. Yes.

Q. And you get it by water at 90 cents, including the discharging?—A. Yes.

Q. What return cargoes do you get for that boat out of Port McNichol?—A. They are built for the stone carrying trade. We only get them in the stone carrying trade.

Q. Why could not the same thing happen in Montreal if it was desired?—A. I don't know.

By Mr. Cowan:

Q. I would like you to look at that railway map behind you. You say you take your coal from some point in the Eastern States and take it as far west as Broadview. Would you indicate on that map where you get the coal in the United States?—A. It is loaded at Astabula, Cleveland, Camion, down as far as Toledo.

Q. How far would they transport that by rail on the American side before you reached the lake shore?—A. From 150 to 175 miles. There is some of it comes from the South, further than that.

Q. We will keep that in mind now, that number of railways. Then you transport it up the lake and trans-ship it, take it west as far as Broadview. Indicate on the map where Broadview is. It is in Saskatchewan.

Mr. KEEFER: It is about on the boundary.

Mr. COWAN: It is 90 miles east of Regina. You have seven hundred miles there. Now you bring your Alberta coal as far east as Broadview. Judging by that map you are taking your coal 175 miles on American territory and up the lakes, the whole distance being additional to the amount you had to transport it from the Alberta points to Broadview. Tell me why it is that it is more profitable for you to carry that west 700 miles over your road, plus the eastern distance additional to what you would have bringing it east from the western points?—A. In the first place, of course, your lake transportation—I have explained that boating business, of boats going up for cargo on a cheap rate for cargo. For instance, this year it is very difficult to get boats to move on account of no ore coming down.

Q. That does not explain it at all, because on Canadian soil you take that coal west 700 miles and you only bring your coal east 700 miles. You are taking it really to centre points. But on the eastern haul you have all the lake and all the American haul in addition. Now why?—A. Because with the Canadian haul, that is hauled at a time when cars would otherwise go back empty. You are utilizing the empty car movement. They come into Fort William with grain and go back with coal. When they come up with coal they go back empty again.

Q. That explains the whole thing?—A. That is the way they figure that. I am not a transportation man. I am just telling you the general principles, what they are.

Q. I can quite understand that. Do you when you are figuring out the price of coal and distributing your patronage to the Americans, building up American mines and American cities to their advantage, do you take into your calculation the fact that if you bought that mine in Alberta and thereby built up Canadian cities and

[Thos. Britt.]

Canadian industry, that traffic on your road would be increased that much, whereas on the other hand, you are losing?—A. That is all taken into consideration, and economics figured out, and the Canadian Pacific is doing to-day and always has purchased the western coal as far as they could possibly buy it and bring it east, and in certain seasons of the year they bring it clear through to Winnipeg when the conditions permit it. The Canadian Pacific Railway is really building up industries on their own lines, and they do it at times even when they have suffered loss by so doing, but there is a limit to where you can foster industries.

Q. I understand that, but it does seem to me strange that it is more profitable for you to bring that coal 1,500 miles further than you can get it on your own lines. It is an awful discrimination in favour of Americans.—A. Look the other way. We will probably be able to lay down coal at Fort William this year at \$6.50 duty paid. Now we have only 400 odd miles to Winnipeg for that coal, into Winnipeg. Our Alberta coal is costing us over \$5 on the car. Look at the other side of it. The American coal can be mined, transported by rail and carried by water and come into Fort William for with about \$1.25 what it costs to mine in Alberta.

Q. We want to find out why it is?—A. The whole thing gets back to the cost of the coal.

By Mr. Keefer:

Q. Taking the same position, that is applicable to Nova Scotia coal. Nova Scotia coal costs you \$8.10.—A. Yes.

Q. You can put it in Port Arthur for \$8.50. There is something wrong. It might be due to increased mining difficulties in Nova Scotia?—A. Yes.

Q. Those are the outstanding facts?—A. Yes.

Q. And the Nova Scotia coal would have that freight haul and the duty always in their favour?—A. And the exchange.

Q. They would have this if they would only reduce the cost of mining?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. What do you calculate in determining as to wherein the American coal would compete with the Western coal for your own carrying of it, what rate per mile?—A. I really could not say that offhand, I don't know.

By Mr. Keefer:

Q. Speaking of your coal, you are giving us a lot of information which is very valuable, speaking of that coal in Nova Scotia, apart from what you bring up to Quebec and Montreal you must buy considerable for consumption in New Brunswick and Nova Scotia. What quantity do you consume in the Maritime Provinces?

The CHAIRMAN: He has given us that.

WITNESS: In 1920 we purchased from the Dominion Coal Company for the lower provinces 101,000 tons, and by rail we purchased 13,000 tons.

By Mr. Keefer:

Q. What was the price?—A. I gave you the price. Another thing I want to mention is this, that we have always had difficulty in getting Springhill coal because there are certain reasons or obligations why we cannot get it, although Springhill would be the most valuable coal for the Canadian Pacific on account of the shorter rail haul. They insist on giving us bituminous coal by water.

Mr. BALL: It is in competition with \$2.80 whereas Springhill is only \$2.55.

By Mr. Cowan:

Q. Evidently this Nova Scotia coal is entirely satisfactory to the C. P. R. for their uses, and the only question is as to making an arrangement to get it. Has

[Thos. Britt.]

your company ever tried to do with any of the Nova Scotia mines as you have attempted to do with one of the American mines, get a preference or have an interest in that mine? Have you ever thought of getting an interest in a Nova Scotia mine in order that you might supply yourself from it?—A. We have thought of it once or twice, but first of all you would have to find both rail and water outlet. For instance, the coal coming to Montreal is practically a water proposition. We could not mine the same quantity of coal in the winter as in the summer, and you would have a difficulty in finding an outlet for the coal in the winter time.

By Mr. Keefer:

Q. I thought the C. P. R. did some work in New Brunswick?—A. No, we have no property in New Brunswick. We have a term contract with the Minto Coal Company.

Q. What do you get that coal at?—A. \$5.36 at the mine.

Q. Where do you bunker your ocean ships with coal?—A. We bunker them at St. John in the winter and Montreal and Quebec in the summer.

Q. That is Nova Scotia coal?—A. That is Dominion Coal Company's coal. We used that last winter.

Q. That is transported to St. John?—A. Yes.

Q. By water?—A. Yes, or to Montreal by water.

Q. Does that price stand you the same as the rail coal?—A. We paid last year \$13 a gross ton trimmed in bunkers.

By Mr. Douglas (Cape Breton):

Q. At St. John?—A. Yes. Up to the first of this month we had been paying \$9 at St. John for coal, only a forty-eight hour run from Sydney.

By the Chairman:

Q. For railway coal?—A. For railway coal, yes.

By Mr. Keefer:

Q. Do you happen to know what is the ratio of coal cost in a dollar's worth of freight? We can see then the ratio of coal on these high freight rates?—A. No, I don't know that I have that economic figure. I am really more confined to actual coal movement.

Q. Would it be one-fifth, taking it in round figures?—A. I would have to know more about it before I would even say one-fifth.

By Mr. Maharg:

Q. Have you any difficulty in securing what coal you require from the Western market?—A. Not when they are working. We have had some difficulties with strikes, and when there was trouble. We have had no trouble for sometime past.

Q. You had trouble to such an extent that you had to move your American coal further west?—A. Yes, we had to go out and buy an inferior coal, Illinois coal and Indiana coal.

By Mr. Cowan:

Q. Is the American coal usually up to the standard of the Canadian coal?—A. There is good and bad, but if you can pick your American coal, the American coal is superior to the Canadian coal.

Q. If you can pick it?—A. Yes if you have sufficient opportunity to select it as you have at the present time with a free market. You can pick and choose to-day.

Q. Ordinary good American coal is not equal to Canadian?—A. There are a lot of inferior coals in Nova Scotia.

[Thos. Britt.]

By Mr. Douglas (Cape Breton):

Q. They compare with the ordinary coal but they are not comparable with the good American coal.—A. Where the Cape Breton coal suffers on a locomotive, it is its friability. It is a friable coal, but mind they have some excellent coals in Cape Breton too, but they are all mixed together when they are shipped to anybody. They don't keep them separate.

By Mr. Cowan:

Q. Do you think it would be advantageous to them to have them kept separate?—A. I think their cost would be too high. Their assembling would be a big proposition.

By Mr. Chisholm:

Q. You referred before to confiscating your coal, being taken over by the Canadian National roads. You said that that discouraged you from making a contract?—A. Yes, I said it discouraged me.

Q. Do you anticipate trouble in that respect this year?—A. It is a proposition that is very hard to follow out. At the present time the production of coal all over America is at a very low ebb.

Q. The consumption?—A. The production is at a low ebb. To-day on the American side they are millions of tons behind the same date last year, due to the fact that nobody is buying and nobody is stocking. If the industries come back with a whirl with the season then they may arise again.

By Mr. Cowan:

Q. Would not that indicate to you the advisability of fixing up a contract with Nova Scotia as quickly as you can?—A. Not at that figure.

Q. If you could get the right figure you would be willing to do it?—A. I have my protection on the ground now. I differ from a good many others in that regard. The Canadian Pacific has always made it a policy to carry heavy stocks of coal as insurance.

By Mr. Keefer:

Q. How heavy do you carry to the Head of the Lakes?—A. The way they figure Fort William coal is, they have to anticipate the next season's requirements. You have to figure a year ahead. Then you have always got to figure another month or two in the spring on account of difficulties with labour and so forth.

Q. That is for the coal supply from Fort William to where?—A. To Broadview and further.

Q. How far down East do you come with your Lake Superior distribution?—A. Lake Superior coal does not come East of Fort William, but we have a place at Jackfish.

Q. You sweep from Chapleau to Broadview with your water distribution?—A. I do more than that. I have another port on Georgian Bay, Byng Inlet.

Q. At Port McNichol also?—A. That is a boating proposition.

Q. How far do you swing east from Byng Inlet?—A. As far as Chalk River.

Q. So you practically sweep that far by using Port Arthur as a base?—A. Yes.

Q. It is a project that does not apply to the St. Lawrence?

Mr. COWAN: That is what beats me. I want to find out the difficulty of doing it.

Mr. KEEFER: The difficulty is the canals.

Mr. COWAN: They are not even getting up to Montreal.

WITNESS: If they cannot compete with rail coal at Montreal with the high American freight rate into Montreal look at what they are going to be up against.

[Thos. Britt.]

By Mr. Keefer:

Q. Why don't you take your coal down by water if you have ability to do it?

By Mr. Douglas (Cape Breton):

Q. How do you account for the fact they could do it in 1912 and 1913, and make a profit of \$2.13, and with a water rate of \$1.60 and 80 cents they cannot do it now?

Mr. COWAN: That is what I cannot understand. There is a nigger in the fence somewhere and I want to find that nigger.

By Mr. Chisholm:

Q. Whilst looking for the nigger in the fence I want to ask a question. I am interested in the confiscation process. You had a contract with the Dominion Coal Company, so had the National Railways. Is it possible that the Dominion Coal Company were giving you a greater percentage of their contract than they were giving the National Railways?—A. The principal trouble I referred to was the purchase of the Greenwood Colliery coal, owing to inability to get Springhill coal, we bought coal from the Greenwood Colliery, and that is the coal they took.

By Mr. Douglas (Cape Breton):

Q. They did not have a contract with the C.N.R. at all at the time?—A. I don't think so. Why it was so clear to me, it was during a time when we were scratching for coal.

By Mr. Chisholm:

Q. My object in asking these questions is we should not like to see any process gone through by which you would be discouraged from buying Nova Scotia coal on account of these confiscations?—A. During the time of the arbitration over this coal, I was told the Canadian Pacific had no business buying coal from Springhill. I was told that in the presence of Mr. Magrath. It was not on our territory, to keep out of it.

Mr. COWAN: I consider any company has the right to go into any part of Canada to buy anything they darn well please.

Mr. DOUGLAS (Cape Breton): The C.P.R. should have equal rights of confiscation with the C.N.R.

By Mr. Cowan:

Q. Would you be prepared to go into the Nova Scotia field if that reason were removed?—A. Mr. Dick told me he was very busy with this Committee, and he had not had time to look up the prices.

By Mr. Douglas (Cape Breton):

Q. I suppose these negotiations had been going on at the same time with you?—A. No, because our present contract ran through till the first of May. Our contract for Nova Scotia and the lower end expired the first of May.

Q. For coal delivered at St. John?—A. Yes, and I did not take any more than I had to at \$9 per ton.

Q. But you have no outstanding coal for delivery at Montreal?—A. No, although I believe we will use considerable of it in our bunker requirements.

Q. At Montreal?—A. At Montreal, because the bunker requirements are principally served by water. We bunker our boats mostly all from the water side and the Dominion coal is there and it is available and we are using it.

By Mr. Keefer:

Q. Where is Byng Inlet on Georgian Bay?—A. It is close to Parry Sound.

Q. You take it to Sudbury and back on your main line to Chalk River?—A. Yes.

Q. You also bring it down the Toronto way?—A. Only as far as MacTier, the first divisional point.

Q. That would be only one-third of the way between Sudbury and Toronto?—A. I don't know what that division would be.

By the Chairman:

Q. Generally speaking your company is quite willing to purchase and use Nova Scotia coal provided the price is right and you have reasonable assurance of delivery?—A. Yes, and the quality and preparation is kept right.

By Mr. Douglas (Cape Breton):

Q. About what quantity could your company take care of annually?—A. Conditions have changed somewhat in this regard, that when we were buying heavy from the Dominion Coal Company we stocked up coal in the summer time against the winter.

By Mr. Cowan:

Q. Did you find that a profitable thing to do?—A. It was a necessity. You had to take it in by water and you had to stock it all in the summer time but when you come to all rail American movement, it is not the same necessity, and we stocked last fall against the bad weather, which we did not experience, and the result is we have more coal on the ground than we would have in the ordinary years.

By Mr. Douglas (Cape Breton):

Q. American coal?—A. American coal, with which we had to protect ourselves against a heavy season.

By Mr. Keefer:

Q. How much coal would you get at Montreal and other points from the Nova Scotia collieries? You have to take into consideration what you take from the United States?—A. Yes.

Roughly speaking, what would be the total quantity you could consume?—A. They only offered 100,000 tons.

Q. What are your requirements?—A. At the present time they would probably run about 25,000 tons a month.

By Mr. Douglas (Cape Breton):

Q. That is for rail?—A. For water.

By Mr. Keefer:

Q. I am speaking of the ability of Nova Scotia to supply you up to Montreal with coal. What are your total requirements?—A. Considering the stock we have on the ground, the limited demand to-day would be about 25,000 tons a month.

Q. If you had no stock at all, take your bunkering and everything, what is the market of the C.P.R. for Nova Scotia coal?—A. The figures I have given are practically correct and governed by the traffic conditions.

By Mr. Douglas (Cape Breton):

Q. That is to say approximately half a million tons would not be out of the way?—A. No.

By Mr. Cowan:

Q. Did the Dominion Coal Company give any reason when they said you could only have 100,000 tons?—A. The days of giving reasons for anything are gone past.

By Mr. Keefer:

Q. You know as a matter of fact that coal is going out of the country up to this year at very high prices?—A. Yes, and some of it is going to take a little dip now.

By Mr. McKenzie:

Q. How much coal did you get from the Dominion Coal Company the year you got the most during the war?—A. About 527,000 tons.

Q. There was no trouble about getting that coal?—A. No, they were very anxious at that time. They would give you all you could take.

Q. They had their big ships and equipment for handling the coal at that time?—A. Yes, as a matter of fact we have no equipment at all for handling. We have to depend on their equipment for handling.

By Mr. Cowan:

Q. Ships?—A. Yes.

By Mr. McKenzie:

Q. You know that during the war the ships were commandeered?—A. Yes.

Q. Then, of course, they could not send any more coal up the St. Lawrence?—A. No. Some of it was taken for steel products too.

Q. You also know that hundreds and thousands of their men went overseas to fight and that caused a slump in the transportation of coal from the mines in Cape Breton. You are aware of that?—A. Yes, I am also aware of that.

Q. You are also aware that since the war they are trying to get back the markets they had in the St. Lawrence ports?—A. And in New England.

Q. They lost all their markets on account of the war. You are aware of that?—A. Yes.

Q. You are certainly aware there is displacement generally as far as this Dominion Coal Company is concerned?—A. Go no farther back than last year, there was no war last summer and we could not get coal shipped at St. John.

Q. They did not get back to their normal conditions?—A. They gave plenty of coal to the Dutchman.

Q. To what Dutchman?—A. To Holland. There were bigger prices.

By Mr. Chisholm:

Q. As a matter of fact there was not a very large quantity shipped to Europe by the Dominion Coal Company?—A. I don't know what their figures were. There seemed to be a lot of boats there.

By Mr. McKenzie:

Q. Is it not a fact that this embargo which was put on the coal cancelled those Dutch contracts. You are aware of that?—A. Yes, I presume it did, yes.

Q. And they did not send that coal?—A. It was late in the season, wasn't it? It was late in the season that that thing happened. Even before that we did not get the coal.

Q. Is it not a fact that as a purchaser of coal your company would make the best bargain you could, right down to rockbottom?—A. Yes, regardless of sentiment.

Q. Absolutely regardless of sentiment?—A. Yes.

[Thos. Britt.]

Q. I suppose you give the same right to the man who is selling coal. He will sell as a rule on the best terms he can?—A. Yes.

Q. We have been having a surplus of loyalty in this Committee in the past, and the opinions of people who buy for loyalty. Do you buy for loyalty?—A. We have gotten over that. We had to pay a lot for our loyalty during the war.

Q. Talking about the displacement on your contract, that is coal that was consigned to you and was switched somewhere else. That was during the regime of Mr. Magrath, of course?—A. I think it was. I don't know whether it was actually in his time—it was in his time as Fuel Controller.

Q. It was during the time he was Fuel Superintendent, or "Fuel Controller" is the word, I think?—A. Yes.

Q. Was it not a different condition of things entirely to the old time conditions? A. The strange thing about that was that the coal that was selling at high prices in St. John always came through without confiscation. We had to buy that.

Q. Mr. Magrath was in control?—A. Mr. Magrath, I don't think ever cancelled that, because Mr. Magrath at the arbitration made them pay damages.

Q. He fixed the price at our mines. I am simply telling you that.—A. Yes, he fixed the price.

Q. You stated a moment ago you were told in the presence of Mr. Magrath you had no business to be looking for coal?—A. For Springhill coal? Yes.

Q. Mr. Magrath was there then when that statement was made?—A. He was not there at that time as the Fuel Controller. He was there as an arbitrator. I claimed that the coal was confiscated from me at the contract price and I had to pay the higher price at St. John, and I insisted that they pay the difference.

Q. Mr. Magrath, while he was Fuel Controller in charge of things, conditions were different to the olden times?—A. Yes.

Q. The coal miners and the coal managers had little to say. They were under his direction?—A. This particular time it was not done with his approbation at all.

Q. That confiscation was done by the Government railways?—A. Yes.

Q. And they claimed superior power in war time?—A. Yes, and they might claim it again.

Q. There is no war time now. You must understand that during the war time the Government is supposed to have a free hand, I mean for the purposes of war, keeping the trains going and keeping the troops moving. Anything they find they will take it?—A. Yes.

Q. That is what happened?—A. That would be very nice if they did not consider the right of the C.P.R. to move the troops and men with trains.

Q. They had the power, and living in a war atmosphere they did it?—A. Yes, and they will do it again.

By Mr. Chisholm:

Q. Do I understand while this coal was being confiscated from you you were buying the coal from the same source?—A. Not from the same source, but coal coming over the same route.

Q. You could secure that coal at a higher price?—A. Yes, and I had to secure it.

Q. Do I understand that Mr. Magrath sat as the arbitrator between you and the company?—A. Yes.

Q. Well now, it is not very likely he had been responsible for the confiscation?—A. He was not responsible for the confiscation.

By the Chairman:

Q. Under what authority were those confiscations made?—A. What we have we hold.

Q. But there must be some authority.

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By Mr. Keefer:

Q. It was a kind of a war measure then?—A. Yes, it was a war condition.

By the Chairman:

Q. That would not be sufficient. There must be some expressed authority permitting that to be done?—A. No; I remember one case where they came in on our own rails and took two cars out at night from our own rails. They had no authority for that.

By Mr. Keefer:

Q. Railroads have done the same thing, not yours but other roads?—A. Not to go in on another man's property. That is awfully like burglary.

Q. They took his property off your cars?—A. Oh!

By Mr. Cowan:

Q. These conditions do not apply now at all.—They are altogether removed.—A. They are not so very long removed.

Q. You would not expect it now?—A. I would expect it this fall if things might be acute. I would not consider I was safe in putting our coal on rails depending on rail conditions in Nova Scotia to-day.

By Mr. Maharg:

Q. You said you had confiscations even before the war?—A. Yes, we had occasional cars last winter. The time I speak of was when we were scratching for coal.

Q. Confiscations before the war and up to three years ago would be under the Canadian Northern roads. Since then it would be the Canadian Government roads.—A. They would not confiscate coal prior to the war because you could always get all the coal you wanted. There was no difficulty on this score prior to 1914.

By the Chairman:

Q. Are you through with Mr. Britt? I might say we have another representative of the C.P.R.

By Mr. McKenzie:

Q. You have something to do with the hiring of men, I suppose?—A. Yes.

Q. The wages of the men that you have to deal with have gone up within the last few years?—A. Yes.

Q. About what percentage?—A. I think Mr. Price would answer that question better than I would, as to what the increase in wages was.

Q. But it is a very substantial increase?—A. Yes.

Q. And your road has obtained a substantial increase in freight rates?—A. Yes.

Q. And I suppose it is reasonable to anticipate in the view of the increase in freight rates there is an increase in overhead expenses generally?—A. Yes.

Q. Do you include the pay of the men as overhead? Do you call that overhead expenses?—A. The ordinary labour.

Q. Yes, engineers, and everybody you have working about your trains. Do you include this when you talk about overhead?—A. I have not any figures in regard to overhead. Why not leave that to Mr. Price? He is an operating man. He knows more about that than I do.

Q. If any concern, whether it is a railroad or a coal mine, hopes to keep up good wages for its men, it must have good earning capacity?—A. Yes.

Q. If coal mines hope to pay out good wages to their men they must get good prices for their coal; does that not follow?—A. Yes.

By Mr. Cowan:

Q. They must not have higher prices than others or they won't sell. The crux of the thing is if the present prices are going to prevail you are going to alter your
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present territories?—A. As a matter of fact there is a tendency the other way, because as the exchange comes down your competition becomes more keen. At one time the collieries in Canada were satisfied with the duty as protection. Now they have the exchange, which is double. I doubt, if they are going to not only hold their present market but increase it, they have to get their cost of production down. I don't know what goes to make up that cost of production, but there is one factor, the greater efficiency of labour which you are going to obtain, and I want to say that that inefficiency has been passed on to the consumer and the consumer should get the benefit of the efficiency.

By Mr. Maharg:

Q. Can you tell us approximately just how the increase at the Canadian mines compares with the increase at the American mines since prices started to go down?—A. The prices—the American prices were very largely governed by supply and demand, and in order to hold their market and get their market they have come down now to a fair cost basis even though they are sacrificing some of their profits to make a profit.

By Mr. Cowan:

Q. Which the Canadian companies are not doing?—A. No; they want the consumer to be patriotic and pay the difference out of their pockets. I don't think it is a fair proposition. The Canadian Pacific as a whole have always fostered and given reference to the home market, but when it comes to paying out a premium it is not right when it is not necessary.

By Mr. Chisholm:

Q. I assume the cost of production on both sides of the line has increased. We would naturally expect an increase on short distances, and I would like to know if the prices in the American mines increased proportionately with the price on the Canadian side?—A. I think the Canadian costs, without going into detail, are to-day higher. They were not higher at certain periods, but they have not come back to normal nearly as quickly as the American mines have come back.

By Mr. Keefer:

Q. The American price is \$2.60?—A. You can make contracts to-day for \$2.75.

Q. How would that price compare with what it was in 1912, 1913, and 1914?—A. Approximately about double.

Q. It was half of that?—A. About half of that, yes.

By Mr. Maharg:

Q. How about the Nova Scotia and the Western mines. Are they about double?—A. They are more than double. Now they are all over \$5.

By Mr. Cowan:

Q. And one in Nova Scotia over this?—A. The Acadia to-day is asking \$6.50.

Q. It is just a difference between \$2.75 American and from \$5 to \$6.50 Canadian the mines?—A. Yes. The Acadia charge \$6.50, and they can get it because there is no competition.

Q. Is there just the one Western mine where you secure coal?—A. No; there are several of them. I think I have a little memorandum here. I have just put their names in here. We have secured coal from the Hillcrest, West Canadian Collieries, Maple Leaf Collieries.

By Mr. Keefer:

Q. Could you give us before you leave what would be the cost of putting coal from the rail into the ship and vice versa, from the ship to the rail. Suppose we

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were bringing coal from the West by car, what would be a fair charge to allow for getting it from the vessel to the car?—A. I could not tell you that because I know what the Americas mines are. They charge eight cents, but they have an awful lot of heavy equipment for that purpose on these lake ports. They dump four thousand cars a day.

Q. Their charge is eight cents?—A. Yes.

Q. What is the charge from the vessel back to the rail?—A. With a modern equipment you ought to handle that for about thirty cents.

Q. I thank you.

The CHAIRMAN: Is the Committee finished with Mr. Britt?

By Mr. Ball:

Q. As purchaser for the C. P. R. I noticed a moment ago you always provided you were never short. You calculated to have a certain supply of coal ahead?—A. Yes.

Q. During your experience did you ever have any experience of making a contract for a certain quantity of coal, and I suppose your contract is like all others—it is surrounded with so many provisos that it is hardly a contract at all, it is subject to such matters as transportation and a whole lot of things?—A. Otherwise, when is contract not a contract?

Q. Did you ever have any experience where you had a contract and you require coal and could not get it, your contractors could not get cars and could not get transportation or something else, but there was some other fellow who could sell your spot coal, would you accept the coal at \$3 or \$4 or \$5 more than the contract price because it can be delivered right off?—A. There is a lot of that done. There is considerable of that done. That was not done by the first line companies, but it has been done.

Q. I suppose it has been done by coal jobbers?—A. It may have been done by subordinates. It was a case of get all you can when the getting is good.

Q. It is hardly a fair deal. We have a contract with a mine to supply it at certain time and under certain conditions your contractors cannot deliver your coal but some other fellow can deliver it from the same mine, what they call spot coal, but paying a little more for it?—A. Yes.

Q. It appears to me the mines should take some steps to protect and safeguard their customers in that respect?

By Mr. Chisholm:

Q. Has your company discharging plants in Montreal?—A. No.

Q. You have no plant at all in Montreal?—A. We have no plant at all in Montreal.

Q. Nor in Quebec?—A. No, nor Three Rivers. If we take any coal we depend on the Dominion Coal Company to handle it for us.

By Mr. Keefer:

Q. That is one of the reasons why you haul all the way from Pennsylvania field instead of by water?—A. That is one of the reasons. The principal reason is when the coal is delivered, when you take into consideration all the handling.

By Mr. Chisholm:

Q. In that case it seems to me that the Dominion Coal Company has control of that business, that is by water from Nova Scotia. For instance I come from a part of the province of Nova Scotia where there are immense coal fields and where coal can be sent to Montreal. Supposing they did that, you could not take delivery. You have no plant there?—A. No, we have no plant. The Dominion Coal Company is the only one that has a plant accessible to Canadian Pacific rails.

Q. Is there any concern in Nova Scotia that has shipped coal to the C. P. R. where that coal was deposited in some other plant? A concern in Nova Scotia sent coal up to Montreal, and you say there are other plants. Have you known of any

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case when Nova Scotia coal has been sent up and deposited by water in the plant of some concern in Montreal where you took it?—A. Not that I know of.

Q. In other words you have taken no coal from the docks from the Dominion Coal Company and the Nova Scotia Steel Company's plant?—A. No.

By Mr. Douglas (Cape Breton):

Q. Would the same remarks apply to the Canadian National Railway and the Grand Trunk Railway at Montreal?—A. I think so. I know the Grand Trunk, when they get coal down by water they have no water plant of their own in Montreal.

By Mr. Chisholm:

Q. Perhaps it would be a good proposition for your concern to have a plant there so you would have the advantage of competition?—A. It was in the company's plans and the plans were drawn up, but it was abandoned when the war came on.

By Mr. Cowan:

Q. I think you better revise them and buy a mine down there?—A. Suppose I got a mine, how would I get it out?—A. Build a railway in there.

By Mr. Chisholm:

Q. If you acquired a nice little piece of railway in the Straits of Canso, going through there you have billions of tons of coal, Mabou and Port Hood and the whole section there, and you have a ship to take it from Hastings, you will have all the coal you need for your concern for the next hundred years?—A. What will we do with that coal in the winter time.

Q. Burn it, I suppose?—A. How would we get it to Montreal.

Q. Have a plant in Montreal and take that coal up there in the summer time.

By Mr. Keefer:

Q. Could you bank it?—A. What are you going to do with your mine in winter time?

By Mr. Cowan:

Q. Could you not sell it the same as any other company could?

By Mr. Keefer:

Q. Could you not bank it in winter time at an extra cost of 25 cents a ton?—A. When we come to banking and lifting coal, 25 cents a ton does not go far with labour conditions.

By Mr. McKenzie:

Q. You are a railroad concern?—A. Yes.

Q. Your are not running coal mines?—A. Not at present anyhow.

Q. You had better stick to railroading?—A. I think so.

By Mr. Keefer:

Q. But you are interested in mining. You have a Mining Department?—A. That is in Western Canada.

Q. There is no reason why you should not be interested in coal mining.

The CHAIRMAN: I think the Committee has pretty well exhausted the information you desire. Are you finished with Mr. Britt?

Mr. KEEFER: Yes.

The CHAIRMAN: We will call Mr. Price, the Manager of the Eastern Lines of the C.P.R. Since the Committee met this morning a representative of the New Brunswick Government has appeared, and would like a few minutes of the Committee's time this morning. Now if we can finish with Mr. Price in about half an hour, will it be satisfactory to hear this gentleman? Now we will close in half an hour with Mr. Price.

Mr. KEEFER: We cannot tell how it will develop. We will do the best we can.

Witness retired.

[Thos. Britt.]

Mr. Alfred PRICE: Called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. General Manager of Eastern Lines, Canadian Pacific Railway.

Q. How long have you held that position?—A. For eight years. Assistant General Manager and General Manager.

Q. How long have you been connected with the Canadian Pacific Railway?—A. Well, I went over with the Canadian Pacific in 1883, but I have been railroading on part of the C.P.R. since 1879.

By Mr. Keefer:

Q. Are you a traffic man?—A. No; I am a transportation man.

Q. What light can you give us on this coal question? What assistance can you render us?—A. I am not prepared with any statement. I did not know just what information the Committee might desire.

Q. One of the things that is bothering the Committee is why is not the Western coal used further East than Broadview. Can you explain that?—A. I can say that a good many years ago when I was in the West that the Canadian Pacific used to work out economies every year to determine just how far they could bring down the Crow's Nest Coal, how far East they could bring the Crow's Nest Coal, and very often coal was brought further east than it actually paid to bring it because of the competition with the American coal rates, etc., but I think it has always been the policy of the Company to develop the mines and for that reason orders were given to a number of mines in the West for coal, and it was hauled further East than it was economical to do.

Q. Your freight to-day is practically all moving east, relatively?—A. Well, of course, we have the coal west from Fort William and we have the westbound manufactured goods. That is a small factor compared with the eastbound trade for the wheat ordinarily.

Q. So the difficulty is the large accumulation of cars at the head of the lakes. If we could get return cargoes it would simplify this coal question in the West very much?—A. That is all taken into consideration in the economic questions I spoke of.

Q. The same thing applies on account of grain cargoes returning east. You can bring cargoes up there cheaper?—A. Yes.

Q. The last witness told us about the freight haul all rail from Montreal to the mines, what distance from Pennsylvania?—A. The distance by rail?

Q. That you bring it all rail?—A. I should say it would be about three hundred or four hundred miles.

Q. You operate steamships on the lakes and in the ocean?—A. Yes.

Q. What is the ratio of water-borne freight to rail-borne freight, approximately?—A. The cost to handle?

Q. No, the cost of transporting?—A. Oh, I don't know. I am not sure. There are so many factors to be taken into consideration, it would be a very difficult question to answer.

Q. I have been told that the rail freight had to be handled several times more than the water freight?—A. I think that is very true.

Q. You demonstrate that by having your own ships on the lakes and taking your freight from Port McNichol to the head of the lakes and then on to your cars again?—A. Yes.

Q. You would not do that if it were not for the question of cheapness of handling that freight that way?—A. We have some figures as regards all rail rate in the summer time, and we find there was nothing in which we found we would save a great deal of money by keeping the boats running.

[Mr. Alfred Price.]

Q. Do you know what the ratio was?—A. No, I could not say what the ratio was.

Q. So that in the summer time it pays you to handle by water?—A. Yes.

Q. You never think of handling coal or wheat in any other way from the head of the lakes than by water, if you can do it by water?—A. Not at the same figures.

Q. If you could cheapen the cost of handling wheat or coal by water you would not interfere with your rail, I suppose?—A. I suppose that would depend where you meant. On the Georgian bay and Lake Superior?

Q. Anywhere, yes. That is correct, is it not?—A. That is true.

Q. So that the developing of water transportation is not detrimental to the railways?—A. That all depends.

Q. If you can cheapen the water rate, you have more stuff coming by water?—A. True.

Q. I am talking from the head of the lakes down through Lake Erie or to Montreal by water?—A. Well you can handle grain, for instance, more cheaply by water than you can by rail.

Q. How much more cheaply?—A. Well, I would not care to say.

Q. Therefore it is a public concern to endeavour to continue to cheapen that water transportation?—A. Yes.

Q. Not to the detriment of the railway?—A. That is true.

Q. Coming to the Nova Scotia situation—A. About that last question "Not to the detriment of the railway".

Q. If you cheapen the cost of transporting by water you are not hurting the railway?—A. It all depends whether the railway is running the boats or not.

Q. Whether they are or not, it is run by some other boats.—A. If you get the competition between water and rail and make the water transportation very cheap, then the railway would suffer from it.

Q. Why suffer because it is going by water? If there be competition, the rail loses nothing?—A. If it goes by water the rail does lose it. If you cheapen it to such an extent that it goes by water you certainly do hurt the railway.

By Mr. Maharg:

Q. Take it that water rates are two-thirds of the rail rates?—A. All freight will go by water to take advantage of that rate, anyway, won't it?

Q. Nobody would pay a dollar if they can get it for 66 $\frac{2}{3}$ cents.—A. That is true enough.

Q. If you reduce that by half you would not be losing anything by rail, because it has already gone that way anyway.

By Mr. Keefer:

Q. About the Nova Scotia transportation question, can you transport by rail from Nova Scotia at all economically up to Montreal?—A. That would all depend on the price of the coal. We have brought it by rail to Montreal.

Q. In what way is the price of the coal affected?—A. It all depends on the comparative price between Nova Scotia coal and American coal.

Q. Explain in detail.—A. If the price at the mines, plus the freight rates in Canada, is heavier or higher than the price at the mines in the United States, plus the freight rate, duty and exchange, it would not pay to handle the coal from Nova Scotia.

Q. Does it not apply in so far as Nova Scotia coal in the summer is concerned? You would never think of bringing it by rail?—A. No, we would not bring it by rail.

Q. So it is all a question of water borne freight to Nova Scotia?—A. Yes.

Q. Can you tell us as an expert what is the probable cost per ton per mile for coal in transporting?—A. About what it would cost to handle?

[Mr. Alfred Price.]

Q. What is a fair cost, without profit for transporting coal per ton per mile?—

A. I should say perhaps three quarters of a cent.

Q. What should be added to that as a reasonable profit for transportation?—A. To take care of overhead and everything else?

Q. A reasonable profit, not an excess profit.

By Mr. Cowan:

Q. To take care of everything, yes.—A. I should say about twenty-five per cent.

By Mr. Keefer:

Q. Twenty-five per cent of the three quarter cents?—A. I would sooner you would get that kind of information from our traffic men, who are familiar with rates. I am not.

By Mr. McKenzie:

Q. When you say you carry coal at three-quarter cents per ton per mile, does not that include—that would be business. It would pay to do it?—A. At three-quarter cents.

Q. Is not that what you mean?—A. No, I think what Mr. Keefer asked was the actual cost.

By Mr. Cowan:

Q. That is what? That is when you are carrying your own coal. That is what you charge yourself when you carry your own coal. For instance, you carry your own coal from the Crow's Nest down to Broadview, you charge yourselves with the cost of it. That would be the amount?—A. In determining how far East we would bring the Western coal, we would charge about that.

By Mr. Keefer:

Q. Would that include overhead?—A. No.

Q. Your twenty-five per cent increase would simply take care of your overhead?—I suppose it would.

Q. And you would have still no profit?—A. No.

Q. You could not figure on handling a product nowadays and getting anything less than a cent a ton per mile, could you?—A. That is what we are earning. We earn 1.038.

Q. Prior to this increase in cost in moving, it used to be talked of as half a cent a ton per mile?—A. Yes, but the earnings ran from .7 to .77.

Q. So whenever we talk of transporting coal by rail from Nova Scotia or West we have to run up against that cost per mile.

MR. COWAN: Under present conditions.

By Mr. Keefer:

Q. I have been told, I don't know how true it is, that freight going west, some classes of freight got a better rate than coal, for instance, lumber. Do you know anything about that?—A. I don't know anything about that.

Q. You could not figure on handling a product nowadays and getting anything about that?—A. No.

By the Chairman:

Q. Can you tell the Committee about how much coal is consumed in carrying coal, for instance, in moving a ton of coal a hundred miles?—A. That would largely depend of course on the sub-divisions over which it was carried, the heavy grades and light grades and so on, but I think you could figure out the cost of a hundred miles.

Q. Yes. How much coal would you have to consume to move a ton of coal a hundred miles?

[Mr. Alfred Price.]

Mr. McKENZIE: That is higher mathematics, Mr. Chairman.

WITNESS: It would probably take \$10 or \$12. .

By the Chairman:

Q. To haul a ton of coal a hundred miles. How much coal could you haul for this \$10 or \$12? Of course, the question arises, this hauling of the coal long distances, does it pay? Is the consumption of coal so great that it would pay to haul coal for other purposes great distances?—A. That will depend, of course, whether—take that illustration that Mr. Keefer made, if you handle tonnage westbound from Fort William, for instance, he will take say forty tons of coal per car; take forty cars, say there is sixteen hundred tons of coal, you will probably use 250 pounds per mile to handle that.

By Mr. Keefer:

Q. It is only a question of length of distance before you eat up the whole train-load of coal.

By the Chairman:

Q. It would be about eleven thousand pounds, five and a half tons, to carry sixteen hundred tons from Fort William to Winnipeg.

WITNESS: No, it would be 250 pounds per mile. You have 420 miles to Winnipeg.

By Mr. McKenzie:

Q. How much would it be altogether?

The CHAIRMAN: That would be 110,000 pounds.

WITNESS: It would probably take 30 tons to haul that to Winnipeg. The subdivisions are 120 miles each.

By Mr. Keefer:

Q. Following that point a little, what is the ratio of the fuel end of your transportation on a dollar's worth of freight, say, what proportion of that is fuel?—A. I would not like to venture an opinion on that because there are so many factors.

Q. Say at the head of the lakes or Montreal. Take Montreal as an example if you want to. How much would be your proportion if you could give it to us of your freight rate?—A. Do you want to know what proportion of our traffic is handled as fuel?

Q. Not what proportion of your traffic is handled as fuel, but you can give us that also, but what proportion of your receipts is eaten up in the cost of fuel?—A. I have not the data with me to enable me to answer the question.

Q. Has your company been considering, where there is so much water power, electrification?—A. They have not gone into that at all, no.

Q. Is there any prominent official of your company that could help us on the question with information as to the benefits or losses by way of electrification of some of our railroads?—A. We find this, that it does not pay to electrify a line until you have a very dense traffic.

Q. Go ahead, give us that information?—A. The result is that notwithstanding the fact that electricity has been used for a great many years on the New York Central, for instance, that the only part of their line they have electrified is that portion right close to New York, and on all the rest of their lines they still use steam because they find it more economical, and that is a line running through the densest territory.

Q. Take as a contrast to that, the Chicago, Milwaukee and St. Paul. That is electrified how far?—A. It is electrified right across, I think.

Q. How many miles?—A. Three hundred or four hundred miles, I think.

Q. Do you know what the result of that is in the way of benefits?—A. I don't know just how the cost of the electrical portion of the road compared with steam.

[Mr. Alfred Price.]

Q. They would not do it at a loss?—A. They figured on making money.

Q. I suppose they had cheap water nearby?—A. Yes.

Q. It is not so vastly settled country?—A. No, it is a mountainous country.

Q. The settlement of the volume of freight is not so much a question of electrification. It is the cost of coal.—A. It is the cost of installation that is the big item.

Q. Once that is done your maintenance and operation charges are much lower?—

A. Our company made some studies in the mountains some years ago.

Q. Is there anybody who could give us those figures?—A. Our Chief Engineer could give you those figures. That would be very interesting and I am sure he would be glad to come and give you that information.

Q. Who is he?—A. J. N. R. Fairbairn, the Chief Engineer. He is the man to do it, I think.

Q. You would rather I would not follow up that at all?—A. I would not mind.

Q. Do you know anything more about it?—A. No, I don't know anything more about it. We have always figured as far as we were concerned on eastern lines that the time had not arrived for it.

Q. Speaking of density of traffic, would you not call your traffic between Montreal and Toronto, and Montreal and Ottawa dense traffic?—A. No.

Q. Where is your dense traffic?—A. The densest traffic we have on the Canadian Pacific, taking a whole year, is between Smith's Falls and Montreal.

Q. Smith's Falls and Montreal is your densest point?—A. Yes.

Q. What about the lines that parallel from Smith's Falls to Toronto?—A. Not nearly so heavy, because the Smith's Falls subdivision, as we call it, takes the traffic to Montreal and also from Western Canada.

Q. Speaking of traffic, would you not call the traffic between Montreal and Toronto on the Grand Trunk, dense?—A. That would be the densest part of the Grand Trunk, yes. It is not dense as compared with some of the railroads to the South.

Q. Quite right, on account of their increased population, but the railways to the south have not the same opportunities for electrification that we have. We have water powers from Montreal until we get to the Prairies on that road and practically up to Toronto?—A. That is true.

Q. So that it is a mere matter of an engineer to give us that data as regards operating against capital cost?—A. Yes.

By the Chairman:

Q. There are many complaints throughout Western Ontario, at least, that one of the difficulties of securing their supply of coal is due to the lack of cars at the mines during the war. There was some last year.

Q. Last fall?—A. Last fall, yes.

By Mr. Cowan:

Q. When the Alberta Government representatives were here they suggested—

The CHAIRMAN: Would you mind letting him finish that statement.

Mr. COWAN: I beg your pardon.

WITNESS: The trouble was largely due to winter conditions and the opinion of railroad men in the United States is that the trouble afterwards was due to control by the United States Administration, controlling the railways.

By the Chairman:

Q. Would you anticipate any trouble this year?—A. I don't think so. I don't think there will be any trouble.

Q. Better supply of cars and less traffic generally?—A. I don't think they have many more cars but they have a surplus of something like six hundred thousand cars in the States to-day.

[Mr. Alfred Price.]

By Mr. Cowan:

Q. When the representative of the Alberta Government was here he said one of their big complaints in Alberta was that the cars were not properly distributed, that is, some of the lines could not get cars at all, while others might have plenty, and he suggested some person being put in as an administrator to place those cars where they were required. Would your railway company have any objection to anything of that kind?—A. I should say so, yes.

Q. Why?—A. Unless it could be shown that there was unfair treatment on the Canadian Pacific.

Q. That this means, as is stated definitely in many cases, they could not get the cars and as a result they were badly handicapped and would have to shut down in certain periods. If that is so would you not consider that a case in which the Government should interfere?—A. I don't believe any outside party could distribute equipment as well as the railway men.

Q. The various railway companies would themselves agree on a party, on a system?—A. I don't think it would improve matters. I believe that railroad men can do that work better than anybody else.

Mr. MAHARG: We have had to check them up occasionally in connection with grain.

By Mr. Cowan:

Q. Why would it not apply in coal just as well as it does in grain?—A. Because Mr. Maharg and I would not agree about the distribution of cars for grain.

Q. Still if the people are suffering and the mines are suffering then it is up to the Government to take action?—A. I am representing the Canadian Pacific, Mr. Cowan, and as far as I know about the West, and I had charge of the Alberta Division myself for six years, there was never any trouble about an equal distribution of the available equipment, and I don't believe there is now. I am speaking of the Canadian Pacific only.

Mr. KEEFER: I think the other witness's testimony was chiefly, their coal mines were on the Canadian National.

Mr. COWAN: He did not single out the Canadian National. Of course, they will be up in that part of the country, but his proposal would apply to the whole province of Alberta, and the car distributor would have to cover the whole territory.

Q. Now what I want to find out is, what those objections are founded upon?—A. In the first place I don't think there should be any interference with a railroad in the manner in which they distribute their equipment. I think if it can be shown that there is any discrimination then the railroad should be taken to task for it, but in the past our experience has not been that commissions who interfere with the work of the railroad operators has been a very great success.

Q. You don't believe in commissions then unless they increase the rates? Is that a fair question?—A. I don't know that it is a fair question.

Q. I won't ask you for an answer.—A. I think Mr. Carvell can give you a pretty good explanation as to whether the rates should be increased.

Q. He probably will have to.

By Mr. Keefer:

Q. You don't think your company would have any objection whatever to your engineer giving testimony as to the question of electrification?—A. Not at all. I am sure our president would be glad to have him come.

By Mr. Cowan:

Q. You don't know anything about rates at all, the present rates?—A. No, I am not familiar with rates.

The CHAIRMAN: Anything further to ask Mr. Price?

[Mr. Alfred Price.]

Mr. KEEFER: No, thank you.

Q. What proportion of the freight rate is fuel in transportation? You can give that when you make that report.

By Mr. Douglas (Cape Breton):

Q. There is just one question I would like to ask. Mr. Britt gave the price of American coal at \$2.75, the freight rate \$3.71, and with the rate of exchange and duty \$7.76. This was apart from the haul on the Canadian Pacific lines for coal taken into Montreal from the United States. Now with an estimate of three-quarter cents per mile, will you give us the additional amount that should be added to that to make your costs in Montreal.—A. That rate is right in Montreal.

Q. As I understood Mr. Britt, it was \$3.71 on lines other than the C.P.R., until it came to the C.P.R. line?—A. Before the other lines delivered to us right at Montreal.

Q. That includes it all?—A. That includes everything except the local terminal switchings.

Q. Which would amount to about how much?—A. It would probably amount to 40 cents a ton.

Q. That would make a total of \$3.16?—A. Yes.

Q. That is all?—A. Of course there is switching also on Nova Scotia coal when it comes to Montreal.

Q. It would be about the same, I suppose?—A. Yes.

Witness retired.

NOTE.—After the conclusion of the testimony of the above-named witness, the following memorandum was supplied by the witness:—

“Q. How much coal is used in transporting one ton of coal one hundred miles?—A. About fifteen pounds.

“Q. Out of every dollar the Canadian Pacific earns how much of it is paid out for fuel?—A. I have not the data with me to enable me to answer the question.”

Mr. J. E. MICHAUD, called, sworn, and examined.

By the Chairman:

Q. Have you any official position?—A. I am a member of the Executive of the Province of New Brunswick without portfolio.

Q. You are representing whom to-day?—A. I am representing Hon. Mr. Foster in reply to your courteous invitation to appear before the Committee and lay before you the suggestions of the province New Brunswick had to make in regard to the fuel situation in New Brunswick.

Q. You have a statement, have you?—A. Yes.

Q. We will be glad to hear it.—A. As the members of the Committee are aware, we have several mines in New Brunswick around Minto, Minto coal fields, and at the present time four of the mines are closed and there is only one mine supplying coal to the C.P.R., the Minto mine, under contract, and the difficulty seems to be on account of the freight rates. There is only one branch line connecting the coal fields with the main lines in New Brunswick. That is the old Central Railway connecting between Minto coal fields and the C.P.R. or the Transcontinental running from Edmuston to Moncton. The Transcontinental runs 4.9 miles from Minto, and the suggestion is that the Government Railways should build a spur line to the Minto Minto coal fields of 4.9 miles distance to compete with the C.P.R. The information is that the C.P.R. has put on a rate of 80 cents a ton from Minto to Chipman, a distance of 12 miles. Chipman is a point on the Transcontinental. The C.P.R. have

[Mr. Alfred Price.]

a rate of 80 cents a ton and it materially increased the freight, and the Minto operatives cannot compete with the Nova Scotia operators and the Springhill operators, more particularly the Springhill operators.

By Mr. Keefer:

Q. That 80 cents is for what mileage?—A. Twelve miles.

By Mr. Cowan:

Q. Did the C.P.R. put that on, or was it by order of the Railway Commission?—A. I am informed the C.P.R. put it on.

Q. That is to some competitive point on the Canadian National?—A. Chipman, and by building a spur line from the coal mines to the Transcontinental we would have competition between the C.P.R. Take the C.P.R. now as an example: the rates between Springhill, which is a distance of 306 miles from Edmundston on the Transcontinental, is \$2.50, a distance of 306 miles, as compared with \$2.55 for a distance of 203 miles, a distance of 103 miles shorter between Springhill Junction and Edmundston, and the rate is 5 cents per ton more.

Q. That includes 80 cents on the C.P.R. from Minto to Chipman?—A. The Canadian National Railway haul coal from Nova Scotia at half a cent per mile per ton, while the Canadian Pacific from Minto hauls coal at $1\frac{1}{4}$ cent per mile.

Q. What are the comparative distances?—A. That would be the mileage. That would be 103 miles shorter from Minto to Edmundston. We have taken that as a point where coal is to be delivered. We would ask that the Government Railways do not use any Minto coal at all on the branch lines in New Brunswick. They haul coal from Nova Scotia to supply the branch lines in New Brunswick. If New Brunswick coal was supplied to Edmundston, Devon and Campbellton divisions—

By Mr. Keefer:

Q. You heard Mr. Britt's statement as to the cost of Minto coal?—A. Yes; \$5.36.

Q. Is that correct?—A. I think it is.

Q. How does that compare with the Nova Scotia price?—A. I don't know.

By the Chairman:

Q. What is the output of the Minto mine?—A. They can supply at present time two hundred tons a year to the railways exclusive of the local market. They are now only supplying about fifty thousand tons to the C.P.R. out of only one mine. But the others, which would require about two hundred thousand tons a year, the Government Railways and the industries which have made contracts are interested in the Minto mines, but cannot get their coal there on account of the high freight rates.

By Mr. Keefer:

Q. How many tons per year?—A. 200,000 tons.

Q. You said 200?—A. 200,000 tons for the Canadian National system and the local industries. That includes the Fraser Pulp industry in New Brunswick. We could supply also about 50,000 tons a year to the American industries right on the border in the state of Maine. They would take Minto coal if their rates could be made reasonable to supply them. You understand the New Brunswick Government is interested in this for many reasons, inasmuch as the development of local industries would give employment to local men who have been out of employment for a certain length of time at that point. Then it would be a saving in the administration of the Government Railway, a saving in the hauling of their coal, instead of hauling all the way from Nova Scotia up to Edmundston or to Campbellton, they could haul it from Minto and the province of New Brunswick derives a royalty from this coal.

Q. Who owns the Minto mines?—A. It is an incorporated company. I don't know.

Q. Some years ago it was generally assumed that the C.P.R. were interested in it?—A. There may be something to that.

Q. Do you know anything about it?—A. I think Sir Thomas Tait, of Montreal, is interested in it.

Q. He was the one who opened it up I understand? He was the former manager of the C.P.R. Is he still connected with it?—A. I think he is still connected with it.

By Mr. Cowan:

Q. Are those mines difficult of operation?—A. There is a little more difficulty I would say than in other mines.

Q. As compared with Nova Scotia mines?—A. As compared with some of them. I am informed they are more difficult to operate than some of the Nova Scotia mines.

Q. And yet you are producing coal to-day at about a dollar a ton cheaper at the pit mouth than they are in Nova Scotia.

By the Chairman:

Q. What would this railway cost?—A. The construction of that spur line, you mean?

Q. Yes?—A. It would cost about \$150,000 to build, and if recommendations could be made whereby help could be given by the administration of the Canadian National Railway to the province to build that spur line in co-operation, I am informed the province would join with the Canadian Government to build that spur line in order to relieve the situation.

By Mr. Keefer:

Q. What about your other mines? Can you tell us why they are not working?—A. Because they cannot compete with the Nova Scotia mines on account of the high rate of freight.

Q. The freight rate is affecting the situation?—A. Yes.

Q. How are they situated as regards mileage over the Transcontinental?—A. At the present time they are twelve miles via C.P.R. branch lines, and they would be four miles by building the spur line.

Q. That is the Minto? Are the others the same?—A. They are all in the same area.

By Mr. Cowan:

Q. What is the quality of the coal as compared with the Nova Scotia Coal?—A. Some claim it is not as good; some claim it is as good, but with us, if the C.P.R. finds it good enough to operate its branch lines in new Brunswick with that coal, I think it would be good enough for the Government Railway to operate their branch.

By Mr. Douglas (Cape Breton):

Q. What is the freight rate say from the Minto field to Campbellton?—A. I have not those figures, Mr. Douglas, but the distance would be about the same as to Edmundston.

Q. And you gave the Edmundston rate as how much?—A. difference of 5 cents between Minto and Edmundston and Springhill against Minto, although it is 103 miles shorter.

By Mr. Keefer:

Q. Is your seam a narrow seam in New Brunswick?—A. Yes, that is what I understood makes it difficult to operate.

Q. What is the annular output of the Minto to-day?—A. They supply the C.P.R. about 50,000 tons. I have not figures of the exact output.

Q. I suppose we would get that from your mining returns of the province?—A. Yes.

By Mr. Chisholm:

Q. Your complaint of this comparatively very high freight rate, 80 cents a ton on the C.P.R. Did you ever appeal to the Railway Board for a correction of that?—A.

[Mr. J. E. Michaud.]

An appeal was made I think some time ago, and we were given to understand that at a later period opportunity would be given to the province to appear before the Railway Board and nothing has been done since. But we intend to prepare our case and present it to the Railway Board. In the meantime we received this invitation to appear before this Committee.

By Mr. Keefer:

Q. Is there any suspicion in New Brunswick that the Minto is under the control of the C.P.R.?—A. I don't know.

Q. Don't you think it is time to find out?—A. I am not giving evidence on doubts. Shareholders of the C.P.R. are shareholders in the Minto Coal Company. That is as far as I can say.

By Mr. Cowan:

Q. You are producing coal there cheaper than in Nova Scotia, and you are selling it at lower prices at the pitmouth. I want to find out why. Do you know whether or not these mines are paying the same rate of wages as they are paying in Nova Scotia?—A. On account of the Union wages.

Q. There is a standard wage all through there?—A. Yes.

Q. Has there been any complaint at all as to the efficiency of the men?—A. No. There have been complaints made by the men that they should be paid more than in Nova Scotia because it is harder work. The conditions were a little harder there, but I don't know whether they were given the rates or whether the complaints were considered.

By Mr. Douglas (Cape Breton):

Q. Are they subject to the Montreal wage agreement?—A. Some are. I understand that the miners at the Minto Coal Company are not subject to union wages. They have a special arrangement with the men, and they are not members of the union, but the miners of the four other mines that I know of are subject to the Montreal agreement.

By Mr. Keefer:

Q. I have here the preliminary report for 1920 of the mineral production in Canada, and I see that New Brunswick produced in 1919, 179,108 tons of coal, and in 1920 it decreased to 161,164 tons. Whereas Nova Scotia ran into five or six millions.—A. I understand it was in 1920 this increased rate on C.P.R. was made.

By the Chairman:

Q. As a matter of fact the Railway Commission has control of that rate, have they not?—A. I think they have.

Q. They have promised to give you an appointment at a later date?—A. Yes.

Q. Would it not be well to try and see what you can do with the Railway Commission as to getting this rate reduced before asking the Federal Government to spend \$150,000 in building a second railway which will not be required under normal conditions?—A. We might wait, but we thought by laying the facts before your Committee, that your Committee would make representations before we had a chance to appear before the Railway Board.

Q. We want to understand the situation thoroughly. Is the production of that field sufficient to warrant two railways being used?—A. I think so.

Q. So the 200,000 tons you spoke of would only represent 5,000 cars a year?—A. Yes. But that is exclusive of I might say the local market.

Q. Do you know anything about your ability to increase your output?—A. We have no doubt about that.

Q. You could increase it?—A. Certainly.

[Mr. J. E. Michaud.]

By Mr. Keefer:

Q. You are putting out a small quantity of coal, less than 200,000 tons, and on that small quantity of coal you are selling it at a less price than the mine that is putting out five or six million tons.

By Mr. Cowan:

Q. Why are you able to produce it practically in the same locality much cheaper than the other mines? What is the reason for it? Is it wages or is it the condition of the mine?—A. I don't know.

Mr. CHISHOLM: That is a very large question.

The CHAIRMAN: I have another appointment at two o'clock. Will the Committee excuse me now? I have to get something to eat. If so, I will ask Mr. Maharg to take the chair in my absence.

By Mr. McKenzie:

Q. Has your coal company any rail mileage at all?—A. No, they have practically none. Of course, the Acadia Coal Company—the C.P.R. has an agreement with the Government of New Brunswick whereby they have agreed to take a certain quantity of coal every year for a certain period, on account of taking over the branch lines built by the province.

By Mr. Keefer:

Q. The province built a branch line into the mine and the C.P.R. took it over?—A. Yes.

By Mr. Cowan:

Q. They did not retain any control over the rate, that is, the provincial government, when they took it over?—A. No.

By Mr. McKenzie:

Q. These coal companies have no railroad?—A. No.

Q. How many are there?—A. I know of five.

Q. Are they grouped together?—A. Yes.

Q. How near together are they?—A. I don't know how large the area would be.

Q. Are they about a mile apart?—A. A mile or two I suppose.

Q. And they depend for their outlet either upon the C.P.R. or the Canadian
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Q. And they have no road of their own?—A. No.

Q. They have no railroad of their own?—A. No.

Q. You know that the Springhill people built their own railroad?—A. I did not know that.

Q. They have a connection from Springhill down to Springhill Junction. That is a company road. You are aware of that?—A. Well, I was not aware till you told me.

Q. The Dominion Coal Company built about 39 miles of railway from Sydney to Louisburg. They built their own railway and the Nova Scotia Steel built three or four miles of road. Do you think when you are going into competition with those companies that the Government should build a railway for you?—A. Has not the Government taken over those branch lines yet?

Q. What I am asking is this—I am just pointing out to you if you are going into competition—there is the Inverness railway, they built 69 miles of railway. I am only pointing out to you that those companies you are going into the open market with have built their own railway, and it would be a rather unfair proposition that the Government should step in and build your railway.

[Mr. J. E. Michaud.]

Mr. COWAN: They were not asking the Government to do it. They are asking the railway company to do it.

By Mr. McKenzie:

Q. You have in mind there is no manna from heaven coming down to build your railway except what is coming from the Government of this country?—A. I think it all comes from the same source.

By Mr. Cowan:

Q. What you are trying to prove is that it would be profitable to the railway company?—A. To the administration of the Canadian National Railway.

Q. For that five miles of railway?—A. It would be profitable to the administration of the Canadian National Railway to take coal and supply their branch lines in the northern part of New Brunswick. It would be cheaper than getting their coal from Nova Scotia. There is between 102 and 75 miles haul difference and it certainly would be cheaper in establishing coal chutes at Devon, Edmundston and Campbellton.

By Mr. McKenzie:

Q. Your proposition is that they should go in there and get coal by opening a branch of their own?—A. Yes.

By the Acting Chairman:

Q. How much do you expect to increase the output of your mines?—A. We would supply the local market at present mostly supplied by Nova Scotia and American coal, and then we would supply the Canadian National Railways no doubt up to about 200,000 tons a year. It all depends upon the activity of the owners in extending their business, but we figure about four million or five million tons a year would be a reasonable figure to expect.

Q. You think there is a territory there which would require about half a million tons a year?—A. Yes.

Q. Reasonably supposed to be tributary to your mines?—A. Yes.

By Mr. Keefer:

Q. Have you been up to the Minto yourself?—A. I have been through there, yes.

Q. Is it not a steam shovel proposition, all your coal?—A. I don't know anything about the way they operate.

Q. That would be a great factor in costs.

Mr. McKENZIE: I think you can rest assured there is no steam shovel proposition in the East at all.

Mr. KEEFER: In the East is not the coal very near the surface?

Mr. COWAN: Seven hundred feet underground.

Mr. KEEFER: In New Brunswick?—A. The vein is two feet underground. It is about the surface of the ground.

Q. It is a steam shovel proposition. How deep underground are those deposits?—A. Some of them are almost on the surface of the ground.

By Mr. Chisholm:

Q. There are some of them forty feet underground.

WITNESS: I have never investigated that far.

By Mr. Keefer:

Q. I will ask Mr. Hudson who is an engineer, if that is not a steam shovel proposition.

Mr. HUDSON: The Minto has a stripping proposition.

By Mr. Keefer:

Q. Some parts of it is a steam shovel proposition.

Mr. HUDSON: A great part of that field is.

By Mr. Keefer:

Q. Is there any royalty or revenue to the Government from the coal mine?—

A. Yes, I had a statement of that.

The ACTING CHAIRMAN: Is there anything else to ask this witness?

Mr. HUDSON: It is ten cents. I don't think it has been increased any.

Mr. KEEFER: When we call you you will be able to tell us about this New Brunswick mining area?

Mr. HUDSON: Yes. I have been in all the mines.

Mr. KEEFER: A scientific knowledge about it.

Mr. HUDSON: Yes.

The ACTING CHAIRMAN: Have you said everything you want to say to the Committee?

WITNESS: Yes.

Witness retired.

The Committee adjourned until Friday, May 6th, at 10.30 o'clock a.m.

HOUSE OF COMMONS, OTTAWA,

COMMITTEE ROOM No. 425,

FRIDAY, May 6, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at ten forty-five a.m.

MR. CHISHOLM: I move that Mr. Maharg, be appointed as Chairman this morning, in the absence of Mr. Steele.

MR. COWAN: I second the motion.

(Carried).

(Mr. Maharg, on motion, assumed the Chair.)

The ACTING CHAIRMAN: Now, gentlemen, the Committee will please come to order, and we will commence the proceedings this morning. We have with us this morning the representatives from the Labour Organizations in connection with the coal mining business in the Maritime Provinces. I understand that they requested this hearing, and I think the better method to follow would be to let them state their case, and then, if there is any further information desired by the Committee, of course, questions and answers will be in order. I understand that Mr. Baxter is the president of the organization, and perhaps it would be better to hear from him first. Mr. Baxter.

ROBERT BAXTER, called, sworn and examined.

By the Acting Chairman:

Q. Mr. Baxter, if you will proceed to state your case as you see it, from your viewpoint, the Committee will now hear you.

A. Mr. Chairman and gentlemen: Our case is that we have had a very hard depression in Nova Scotia. The depression has caused considerable idleness, and the idleness has caused considerable deprivation amongst the miners and their families down there. In the Glace Bay district—that is, Glace Bay and New Waterford—the employees of the Dominion Coal Company in that section have lost an awful lot of work in the winter months—since January; about the middle of January.

By Mr. Douglas (Cape Breton):

Q. Mr. Baxter, first of all, how many members are there in the United Mine Workers in Nova Scotia and New Brunswick? In your organization?—A. About twelve thousand five hundred members.

Q. Therefore, you are representing twelve thousand five hundred members at the present—members of your organizations?—A. Representing twelve thousand five hundred members.

By Mr. Cowan:

Q. Are the miners there all members of the union?—A. All are members of the union.

Q. It is a "closed shop," so to speak?—A. A closed shop. That is, it is a closed shop by reason of the desire of the men. We have no written agreement like that, but the desire of the men is one hundred per cent to be organized.

By Mr. Chisholm:

Q. Will you just go ahead and make your statement?—A. I want to make the statement to give you an idea of what has been lost. In the Glace Bay district—that is, the Dominion Coal Company—the employees in many mines have only been

[Mr. Robert Baxter.]

working two days per week. Some mines have been idle for a very considerable time; such mines as number 15, at New Waterford—that mine has been idle for a very considerable time. There were three hundred and fifty men in that mine when it was closed down. Of course, they have found work for about a hundred and fifty of them or a hundred and seventy-five (that is the latest figure which we have)—one hundred and seventy-five. In number 11 and number 24, and Dominion number 6, the men have only worked about ten days in two months.

By Mr. Douglas (Cape Breton):

Q. How many collieries have worked ten days—A. Number 11, and number 24 and number 6.

Q. Three altogether?—A. Yes.

By Mr. Ross:

Q. Mr. Baxter, how many men are involved there?—A. In those collieries?

Q. Yes?—A. Well, about seven hundred men.

Q. What is the reason—

By Mr. Douglas (Cape Breton):

Q. Would that be seven hundred men in each mine?—A. No, a total of seven hundred men in the three mines. The reason, they say, is the lack of orders—the lack of sales; no demand.

By Mr. Chisholm:

Q. You say “ten days”: You mean they only averaged ten days? Is that what we are to understand you to say—A. No; ten days for the two months. In Sydney Mines, of the three—or rather, the four collieries there, two of them, the “Florence” and the “Princess” have only worked an average of three or four days per week since January, and the “Jubilee” has lost a considerable amount of time; only two days per week, has been its average.

Q. Just there, Mr. Baxter: What was the second one you mentioned?—A. Princess Number 1.

Q. It worked only how many days?—A. Three or four days per week.

Q. I am trying to make a comparison between it and the mines in our own section, on the other side of the Island. You say the men only worked three or four days?—A. Yes. The men in the “Jubilee” colliery, at Sydney Mines, have lost considerable time; one and two days per week has been their average.

By Mr. Douglas (Cape Breton):

Q. Is that since the first of the year?—A. Yes, since the first month of the year. This is an exceptional time. We have not been prepared to keep accurate data or these things. It has not happened since nineteen hundred and thirteen, and last winter was much worse than nineteen hundred and thirteen, so we were not prepared to keep data, and it had grown in volume and got a good start, before we were prepared so that anything I may give you is only an estimate of the conditions. Now, in Pictou county, in the Acadia Coal Mines, there are employed about fourteen hundred men, and only three hundred of them have been working. That has been going on for four or five weeks now. At Westhill, in Pictou county, they are working about three days a week.

In Cumberland county, at Springhill, the men are working on an average of four days per week, and in the other smaller mines, some of them have been closed down for a considerable period of time, while others have been working three and four days a week. In the Minto section—that is in New Brunswick—there are about six hundred men employed, and many of them have not worked a day this year yet. We met with the operators at one time and arranged a wage rate at the beginning of the year, and at that time they promised steady employment; they said that conditions

[Mr. Robert Baxter.]

were out of balance, and the adjustment, from their viewpoint, would mean that the men could work steadily.

By Mr. Cowan:

Q. Where was that?—A. In the Minto district. There are several small companies in Minto, and I am speaking of those several small companies.

By the Acting Chairman:

Q. The adjustment of wages would permit the mine operators to compete with other markets?—A. Yes, they were somewhat out of balance.

Mr. CHISHOLM: What was your question, Mr. Chairman?

The ACTING CHAIRMAN: I asked him if the adjustment of wages would enable the mine operators to compete in the markets with other operators, and he said "Yes."

By Mr. Ross:

Q. Did the miners agree to a reduction of wages at the Conference of which you have just spoken?—A. Yes, I am speaking of about two hundred men. The conditions were out of balance with the rest of the district.

By Mr. Cowan:

Q. Were they getting lesser pay than you, or what?—A. Their costs were somewhat higher than the other parts of the district, and the costs being higher, the operators there claimed, if they were made to balance, they could operate and give steady work, but even with that pledge and after a little adjustment, which they said would give the men steady work, there was no improvement.

Q. Do I understand you to say that the cost of producing coal in the Minto area is greater than the cost of producing coal in the Sydney area?—A. They claimed it was, but from investigation they allowed a little adjustment.

By Mr. Douglas (Cape Breton):

Q. Would that be the labour cost?—A. The total cost.

By Mr. Chisholm:

Q. The total of production?—A. Yes.

By Mr. Ross:

Q. What about the labour cost? Was it higher too, Mr. Baxter?—A. The labour cost in Minto would be greater. The material that goes into Minto mines would be low.

Q. After the arrangement was made with the coal operators, did the miners agree to a little reduction in their wages?—A. Yes, they did.

Q. About what percentage? What were they getting before?—A. The contract men were getting so much per ton at Minto. That is, for the operation of cutting, shooting and loading into boxes,—which we term contract men—they were getting from one dollar and eighty cents up to three dollars and fifteen cents per ton.

By Mr. Cowan:

Q. Would that deliver at the pit mouth at that price?—A. In Minto?

Q. Yes.—A. No, there would be the material and overhead.

Q. Did you have a similar arrangement in the Sydney mines?—A. No; This is a peculiar arrangement in Minto.

By Mr. Ross:

Q. Mr. Baxter, after the conference was had between the mine operators and the miners, was a reduction made from that amount you mentioned—a dollar and eighty cents to three dollars and fifteen cents? What did the miners agree to take?—A. There was about twenty cents came off the ton rate.

[Mr. Robert Baxter.]

Q. So they were willing to take from a dollar and sixty cents to two dollars and ninety-five cents, is that it?—A. Yes.

By Mr. Cowan:

Q. What system did you work on then in your Sydney mines? Have you contracted men there also?—A. Yes.

Q. Can you tell me what it costs to deliver coal at the pit mouth of the Dominion Coal Company? What do your men get?—A. Well, that is a very complicated question for us to answer as to the cost at the mine mouth. We can tell you what the men get

Q. I would like to know what the men get; what the labour cost is; what the cost of labour delivering a ton of coal at the pit mouth is, including all labour up to that point.—A. Even knowing the cost of labour it is hard to determine what it would amount to for a ton of coal. We know what it would amount to in a certain operation. We know what it amounts to in the operation of cutting, shooting and loading, but after that there are men who handle it and most of them are on the day's-pay. Now to figure in what the actual cost would amount to per ton is quite difficult for an outsider to do. It would be absolutely necessary, in order to get it accurately, to go at the books of the company. For instance, I will cite one mine—and it is about the same all over, although there are different rates—in one mine it will cost twenty-six cents for the operation of cutting—that is the under-mining—of coal. For shooting it down and loading it, and of course putting up timbers to protect the roof over their heads, it would cost about sixty-two cents. For driving, it goes from eight to ten cents. Now, that takes it to a certain point in the mine, and away from that point it is handled on what we call datal labour.

By Mr. Douglas (Cape Breton):

Q. That is, the day's-pay men?—A. Yes. The percentage of men, as cited from the companies—is from twenty-five per cent to thirty per cent of the men. That is, the figures I have given you include twenty-five or thirty per cent of the men of datal labour. Some mines require more day's-pay men than other mines, and of course the higher percentage of day's-paid men, usually adds to the cost of coal. The cost of the coal will also fluctuate with the number of days worked. If the mine worked six days a week, it would be possible to get it at less cost; If it worked four or five or three or two or one, it would be correspondingly high, as the days went down. The reason is that even when the mines are idle, there have to be a certain number of men employed to keep it in order for the following day, that is the power has to be kept up the pumping has to be done, and there is a constant consumption of coal.

By Mr. Cowan:

Q. The overhead expense is going on all the time?—A. Yes, these costs are going on all the time, and if a mine is idle it adds to the cost.

Q. Have you ever worked in any mines other than those you are in now in Sydney?—A. Not here, I worked in other mines when I was in the Old Country.

Q. The statement has been made here that these are very expensive mines; that is the natural conditions are such that it makes it very expensive to mine coal there.—A. Yes.

Q. From your knowledge have you found it so, as compared with other mines in which you have worked?—A. Yes, it is not the lowest cost of mining, I have not worked in the United States, or in Western Canada, but we know that the cost is higher in Nova Scotia, we know it, because our number of datal men, or day-pay men is higher, that is, the percentage is higher than in either of these sections. In the United States, there are about seventy per cent of the men in the bituminous coal fields who are producers, and thirty per cent handling the coal, while the conditions are reversed in Nova Scotia.

[Mr. Robert Baxter.]

By Mr. Douglas (Cape Breton):

Q. It is practically the opposite?—A. It is practically the opposite, so that, that being so, it is easy to conclude that the operations of producing coal are much more difficult in Nova Scotia than in the United States, and possibly the districts in Western Canada.

By the Acting Chairman:

Q. Could you give us any idea as to about what percentage you think that will increase the cost over the conditions of which you spoke at the other mines?—A. I could not give you the exact percentage just now.

Q. Approximately, would it cost one half more, or double the amount, or what?—A. We know that costs tumble away down as the output goes up, and the overhead handles that much greater quantity of coal—in that case the costs go down considerably.

Q. But, taking for granted that the mines are operating on the same proportion of time, say full-time, you have the one condition where it amounts to thirty per cent cutting coal and seventy per cent working on the day-system, as you describe it, and then taking the reverse of that—A. I usually get it this way, that the average production per man per day in Nova Scotia is a ton and a half per man per day.

Q. That is for each man? That is, the cutters and handlers in every way?—A. Yes, all the men in and around the mines.

By Mr. Cowan:

Q. They produce a ton and a half of coal per day per man?—A. Yes. In the United States it is three or more tons per man per day; somewhat more than three tons. Of course, we should take note that a ton in Nova Scotia means a long ton, and in the United States, in speaking of a ton, we speak of a short ton.

By Mr. Douglas (Cape Breton):

Q. That is, a ton of two thousand pounds in the States?—A. Yes, as against two thousand two hundred and forty here.

By Mr. Cowan:

Q. That is what we want to find out. The evidence here goes to show that in the United States, they produce coal at less than three dollars per ton at the pit mouth, while here it costs somewhat over six dollars, that is, in Nova Scotia,—the Dominion Coal Company. We want to know why that difference; is it in the natural working conditions of the mine?—A. Well, their difficulties have increased of late years. Of course, it has been a gradual increase, and again it has been helped by the opening of new mines. They are opening mines near the surface, and the difficulties have increased by going into the deep submarine workings, as in the submarine workings they are not extracting as much coal as they would of it were not submarine.

By Mr. Chisholm:

Q. That is, per man?—A. No, they do not extract as much coal out of an area; they have to lose possibly half of it to support the roof, because they do not want the sea to come in, and the consequence are that they cannot concentrate the seams, and the lack of concentration will add to the day's-paid men, because they would require a man at a certain point, for a certain operation, most likely, and if the work were concentrated, these men could handle twice as much at that point, if it was coming to them. They are there, and they have just to apply themselves to what they are supplied, that is, in handling boxes, handling timber, putting up timber, and so on.

By Mr. Douglas (Cape Breton):

Q. Mr. Baxter, comparing 1913 and to-day: What would you say the increase in wages was, in the mines in Nova Scotia? Or, if you do not care to take 1913, take

[Mr. Robert Baxter.]

whatever year you want.—A. That would be as good as any, because any increase has gone on since 1913.

Q. What percentage of increase is there since 1913—put it that way—up to now?—A. It would have to be only an estimate because there are differentials. I would estimate it around one hundred and ten per cent.

Q. You think that would be approximately correct, speaking right through and through?—A. Yes. I could cite cases where it is more than that, and of course there are some that are less.

By Mr. Chisholm:

Q. That applies to wages alone?—A. Yes.

By Mr. Cowan:

Q. The price of coal there has gone up over three hundred per cent. Do you know of anything that would make up that difference between one hundred per cent in wages, and three hundred per cent increase in the selling price of coal?—A. No, I cannot just say how that could come about. I have not been in touch with the mining end of it, since that period, and do not know just what could take place.

Q. You do not know?—A. They speak of material costs.

Q. Have you any data on the cost of material in 1913, as compared with the present time?—A. The statement to ourselves is that material has gone up over one hundred per cent, and in some cases five hundred per cent. Of course, they say that in recent negotiations we had with them, that material is on the down grade.

By the Acting Chairman:

Q. About what percentage of the material would that high cost apply to—that five hundred per cent? Would that amount to very much in the total amount of material required?—A. I believe it would be considerable. The increase on ropes and machinery, and so forth, has been high, but that would not be five hundred per cent. I believe the five hundred per cent was just some little incidental that they took advantage of to make their argument appear good.

Q. That is what we want to find out—it was just some small thing—A. Just some small thing. It would not influence it one way or the other, but of course they were trying to make their argument appear as good as possible.

By Mr. Chisholm:

Q. What percentage of the total cost of production is the cost of material?—A. I can only quote the company's own words to ourselves. The Dominion Coal Company cited one dollar a ton, or in and around one dollar a ton. The Nova Scotia cited one dollar and eighty cents.

Q. One dollar and eighteen cents?—A. No, one dollar, eighty cents.

By Mr. Ross:

Q. At what figure did they put the cost of a ton of coal, Mr. Baxter; the cost of production?—A. They do not give us that cost.

Q. I was trying to follow your figures as closely as I could. You spoke of the Minto mines, and the mines back in Nova Scotia, and I should judge the contract men got one dollar and eighty-five cents to two dollars and ninety-five cents for a ton of coal. Then you gave the details. You said they got for cutting twenty-six cents, and sixty-two cents, was it, for shooting?—A. Yes, shooting and loading.

Q. That is eighty-eight cents. Then ten cents for something else?—A. Yes.

Q. That would be ninety-eight cents?—A. Yes.

Q. Where does the rest come in; the difference between ninety-eight cents and a dollar and sixty-five cents? Does that come in in the handling from that point to the pit mouth?—A. No, the two sections have different methods.

[Mr. Robert Baxter.]

Q. Yes, I know, one is contract, and the other is day-labour.—A. No, both sections are contract labour. This price per ton—we term it “contract ton”—is at Minto. In the other mine, I may say, it is contract also.

By Mr. Douglas (Cape Breton):

Q. I think that Mr. Ross understands it this way, that the quotation of one dollar and sixty-five cents, up to one dollar and ninety-five cents—

Mr. Ross: Two dollars and ninety-five cents.

Mr. DOUGLAS (Cape Breton): Yes, two dollars and ninety-five cents; this refers to the Minto field, whereas the twenty-six cent quotation—

Mr. Ross: No, Mr. Baxter said the difference—

Mr. DOUGLAS (Cape Breton): That applies to another coal field.

WITNESS: Another coal field where the operation of cutting coal is entirely different. In the Minto section the operation is by hand picks. It is a low seam; possibly the highest coal is thirty inches high, and of course to get room for their roadways they have to do what we call “brushing,” that is, taking two or three feet of stones; they have to make room ahead for the boxes.

By Mr. Ross:

Q. So the work is more expensive there?—A. It is more expensive at the face, but then with that method the men take the coal and put it on the cage at the bottom which takes it to the surface, and the result is that the day’s-wage men are a very small percentage, possibly about ten per cent are day’s-wage men. This is just the reverse to the Nova Scotia conditions. The Minto conditions are just the reverse of the Nova Scotia conditions.

By Mr. Douglas (Cape Breton):

Q. Would this be a safe statement to make, Mr. Baxter, the average haul underground in the mining field would not be more than four hundred or five hundred feet?—A. Four hundred or five hundred feet is the average, whereas in Nova Scotia they are going down for miles, underground; two miles is not exceptional.

Q. The Minto field consists of a lot of little mines?—A. Yes.

By Mr. McKenzie:

Q. At the Minto, Mr. Baxter, the tendency is to cut along all the time—they work away from the bottom?—A. No; they have a peculiar condition in Minto; the cover of the coal-seams is just about thirty or forty feet thick, and when they get five hundred feet from the bottom, they can easily sink another shaft.

Q. They make a new shaft?—A. Yes, a new shaft at a low cost, and because that so they can mine there independent of the lowness of the seam, and at a reasonable cost.

By Mr. Cowan:

Q. Mr. Baxter, there is evidently a very large market for Nova Scotia coal, provided you can get the price down. The price asked in one big contract was seven dollars per ton. Have your men ever figured out as to whether or not that is a reasonable price to ask, granting a reasonable profit to the company? Do you think it could be reduced? Do your men know if it could be produced at a lower rate than is now asked?—A. Seven dollars at the mine mouth?

Q. Well, on ship-board at the piers?

Mr. DOUGLAS (Cape Breton): That is on board ship?

WITNESS: We had the prices from some of the mines, and they were considerably lower than that.

[Mr. Robert Baxter.]

By Mr. Cowan:

Q. You do not know how much lower?—A. Oh, yes, we had an estimate of the cost, although it would be an approximate one, of four dollars and forty cents for some mines of the Dominion Coal Company.

By Mr. Ross:

Q. Is that at the pit mouth?—A. At the pit mouth, yes. That would be before the last increase was given.

By Mr. Cowan:

Q. Before the last increase in wages?—A. Yes.

Q. How much would that add to it?—A. About thirteen per cent—twelve and half or thirteen per cent.

By Mr. Douglas (Cape Breton):

Q. That would be on the long ton?—A. That would be on the long ton.

MR. COWAN: I do not like these two tons at all. They get us all mixed up. I do not see why they should be allowed. I do not see any sense to it.

WITNESS: We are desirous that it shall all be put on the short ton. It is very confusing to us.

MR. COWAN: To me it is impossible. I cannot think quick enough to figure this out. I cannot do it.

By Mr. Ross:

Q. Those other coal companies' figures?—A. No, our figures.

Q. You thought it cost four dollars and forty cents per long ton at the pit mouth?—A. Yes.

Q. Now, Mr. Baxter, I never was in a coal mine and never saw one. Will you be patient with me?—A. Yes.

Q. I want to find out the cost of the wage-earners of raising a ton of coal to the pit mouth. I want to find out the cost, in the first place, of cutting. I am speaking now of the general run of mines in Nova Scotia. In the first place, does the cutting—

MR. MCKENZIE: Let him tell that in his own way.

MR. ROSS: Will you let me find out this information in my way?

By Mr. Ross:

Q. How much does that work out a ton?—A. Twenty-six cents; and in some mines, thirty-one.

Q. Take the average.—A. Say, twenty-nine cents.

Q. What is the next operation?—A. Shooting and loading.

Q. What does that cost? What do you estimate that to cost?—A. Taking the average again?

Q. Yes, taking the average again.—A. We would say sixty-eight or seventy cents—take an average of seventy cents.

Q. That is ninety-nine cents. Now, what is the next operation?—A. The driving.

Q. What does that cost a ton?—A. We have contract rates for driving. We will say around ten cents a ton.

Q. That is one dollar and nine cents. What is the next operation to get it to the pit mouth? What does "driving" mean, anyhow, Mr. Baxter?—A. Driving means—at the coal face it is away from the main haulage, and they have boys or young men—

Q. Taking it to the shaft mouth?—A. (continuing)—employed to take a horse and with this horse they take in the empty boxes, and bring out the full ones to the point where they are accumulated in what is called a "strip." These may range from ten to twenty boxes. When they get to the main haulage, they are able to take twenty of the long strips. It economizes the operation.

[Mr. Robert Baxter.]

Q. What is the next operation after driving?—A. It is a complicated operation from then onwards. They have the main haulage men and they are either paid—contract men, or day's-pay men.

Q. But you, as a Labour Organization, must have some estimate for your own interests, so that you can approximately know what it costs after the driving is over to get that to the pit mouth per ton. What do you think, honestly?—Oh, possibly twenty cents would take it to the pit mouth.

Q. That is a dollar and twenty-nine cents, the cost of labour in getting coal to the pit mouth?—A. Just a minute. I am speaking now of what we call "wide work." That is, it is easier on the wide work to produce the coal, and of course, the price is lower. They have about thirty per cent of narrow work, which makes the price higher.

Q. What difference would you say, Mr. Baxter—you said twenty-nine cents. What difference would it make over that if you were working on narrow work?—

A. The narrow over the wide work? .

Q. Yes.—A. About twenty cents on the ton. That would be, thirty per cent of the coal produced would be twenty cents more than the cost I have already given you.

Q. Thirty per cent would cost twenty cents more?—A. Yes.

Q. That would be one dollar and forty-nine cents per ton?—A. Yes.

Q. Twenty cents onto the dollar and twenty-nine cents, would be one dollar and forty-nine cents on thirty per cent?—A. Yes.

Q. The other seventy per cent would be produced at the pit mouth, at a dollar and twenty-nine cents per ton, according to your figures?—A. No, that would be for that operation. We have men on the pumps.

Q. That would increase the cost per ton?—A. That would be small.

Q. How much?—A. Oh, it would be very small.

Q. A cent a ton?—A. We would have to group them all.

Q. Would it go over a cent a ton?—A. Oh, around two cents a ton.

Q. That would make one dollar and thirty-one cents at the pit mouth. Is there any other labour operation goes into that?—A. Yes, the timber men.

Q. What would be their labour cost per ton—about?—A. In some mines it would be more.

Q. Give us an average?—A. It is very hard. I should qualify that and say that it is just an estimate. It may be out of proportion, but I would say between eight and ten cents.

Q. Let us see; we had a dollar and thirty-one cents. Say, nine cents for the timber men—would that be fair?—A. For the timber men?

Q. Yes.—A. Yes.

Q. That will be one dollar and forty cents for the labour so far. Now, is there anything else to speak of?

Mr. COWAN: There is the cost of keeping the horses and all that sort of thing.

WITNESS: Yes, and a considerable amount of machine fixers and overmen, and bosses, and so forth.

By Mr. Ross:

Q. Let us get at this—

Mr. McKENZIE: I am afraid my friend Mr. Ross will never see daylight.

By Mr. Ross:

Q. Can you give me any estimate of what that would increase the cost of labour per ton? We are now up to one dollar and forty cents per ton for the cost of coal.—

A. Yes, but that will be the same as the shaft men.

Q. The same as what?—A. The same as shaftmen or timber men.

Q. That would be ten cents?—A. Yes.

[Mr. Robert Baxter.]

Q. That would be a dollar and a half?—A. Yes.

Q. Is that the end of it?—A. No, that is not the end of it.

Q. Let us get the end of it.—A. Yes. I will tell you, as Mr. McKenzie said, we are getting into deep water. The men on the surface come in there.

Q. We are speaking only of getting coal to the pit mouth.—A. Oh, to the pit mouth?

By Mr. Cowan:

Q. Any props to buy, or roofing, or anything of that kind?—A. Yes, all material.

By Mr. Ross:

Q. We are not speaking of material now; we are speaking of labour.

Mr. McKENZIE: Do not forget the railway men.

Mr. ROSS: Mr. Baxter should know. I am trying to get it from him. The point is here that the mine operators have always spoken of the increase in the price of coal. I am trying to find out how much it does cost for labour to produce a ton of coal, because I think there are other things that make the cost of coal high—I think there are high profits for one thing—and I am trying to find out what they are. That is what this Committee is for, and I do not know how we can get it unless by the assistance of such men as the witness.

WITNESS: The way I estimated roughly is that it will cost around a dollar and twenty cents for thirty per cent of the men—that is the contract-men—

By Mr. Douglas (Cape Breton):

Q. The actual producers?—A. Yes. Then we have seventy or seventy-five per cent of the non-producers.

By Mr. Ross:

Q. How much would it cost for them per ton?—A. It would be somewhat less. Their earnings would be somewhat less than the producers.

Q. What would you put it at now, for the cost of coal? You have the producers, thirty per cent of the men, costing a dollar and twenty cents a ton?—A. Yes.

Q. What would it cost for the non-producers, for the seventy per cent?—A. They are not on the ton basis. Many of them do not handle coal at all.

Q. Still the mine operators have to include their cost, before they set a price for coal. Can you give me an estimate of what the cost per ton would be if the non-producers—you say a dollar and twenty cents for the producers; how much for the non-producers? You say "less per ton." How much less?—A. Yes, the wages are less. There are two or three times as many men outside of that. Their wages are less, but of course being less, it would not be two or three times greater than the dollar and twenty cents per ton.

Q. What would you put it at? What would you put the increase in the cost of a ton through other operations? You have got a dollar and twenty cents for the producers; now, what would you say for the non-producers?—A. If it costs a dollar and twenty cents for the producers, it would possibly cost two dollars for the non-producers.

Q. That is three dollars and twenty cents you would put as the cost of a ton of coal as far as labour is concerned?—A. Yes. That would be—

Q. An outside figure?—A. Yes, I believe it would.

Q. What did you say the percentage of the cost of the material was?—A. I gave you the company's statement to ourselves.

Q. Thirteen per cent, was it not?—A. No, material was one dollar a ton for the Dominion Coal Company.

Q. That would make it four dollars and twenty cents?

[Mr. Robert Baxter.]

By Mr. McKenzie:

Q. And a dollar and eighty cents for the Nova Scotia?—A. For the Nova Scotia, yes. We got those before the McKinnon Conciliation Board and before the Patterson Conciliation Board. I am mentioning the Chairmen of both those boards.

By Mr. Ross:

Q. The cost of the labour per ton of coal is presumably three dollars and twenty cents, and the cost of material for a ton of coal is one dollar, the latter being on the company's own figures?—A. Yes.

Mr. CHISHOLM: That is four dollars and twenty cents.

Mr. Ross: Yes, four dollars and twenty cents.

By Mr. Cowan:

Q. Were you working there in 1914?—A. Yes.

Q. At that time the Dominion Coal Company were selling coal at Montreal, delivered at two dollars and sixty-two cents. They are now asking seven dollars per ton on board ship at Sydney. Do you know what has entered into the production of coal that requires that increased rate? Do wages do it? Do materials do it? Or is it the two combined? The point I want to get at is why the present price is required, and whether it is justified?—A. Wages would do it to a certain extent.

Q. You do not know to what extent? That is an enormous increase there.—A. Yes, and of course, material would do it too, and getting away further from the bottom would add to the cost also.

Q. Is it to such an enormous extent as all that?—A. No, I cannot see where it should be to that extent.

Q. You have no idea as to what additional cost, the increased area—what the additional cost is because of the greater distances?—A. No.

By Mr. Douglas (Cape Breton):

Q. I believe, Mr. Baxter, that you gave us the general statement that the increase in wages was approximately one hundred and ten per cent.—A. Yes, one hundred and ten per cent, and their own figures for the increase of material.

Q. But when you say the increase goes from practically nothing up to five hundred per cent—that five hundred per cent would be for some little article—A. Yes, they were laughing when they mentioned the five hundred per cent. It was for some small incidental.

By Mr. Cowan:

Q. Does your organization estimate that the Dominion Coal Company is asking too high a price for their coal at the present time?—A. No, we have not dealt with that feature of it.

Q. You have not dealt with it?—A. No.

Q. Of course, that is a vital point; if they cannot get it on the market to compete with others, they cannot sell their coal?—A. No.

Q. If the cost of production is higher down there than it is elsewhere, something must be done to lower the cost of production, or you cannot get a market. Now, what do your men propose? What is your suggestion?—A. Well, it is not for us to suggest what could be done with that. We would like to help, because we would like the men to get—

By Mr. Ross:

Q. Steady employment?—A. A fair amount of work. It is necessary. Our chief object in coming here to-day is to show you what the men are suffering at the present time on account of the lack of employment, and the inability to stand it, and that inability is caused because the wage rates paid in our province are low; they are low as wage rates, and are much lower in comparison with the wage rates paid elsewhere.

[Mr. Robert Baxter.]

Q. What is that? Please repeat that.—A. The wage rates are lower in comparison with the wage rates paid elsewhere.

By the Acting Chairman:

Q. If you were working full-time, you would get more?—A. The wages we get are based on full-time.

Q. If you were given full-time, we are fairly comfortable, but for broken time—

Q. When you get broken time you have to economize below the point where you think you should?—A. Yes. In our negotiations with the company we have stated that on the average our wages were as good as they were elsewhere, and although the day's wage was lower, and although the wage earnings of the contract-men were lower, the wages we got, taking the average for the year made it up. Now, we are in this position; we are not getting any more than they get elsewhere, and of course, with our low rates, it is affecting us more.

By Mr. Cowan:

Q. Do I understand that you are getting a lower wage there than they are on the American side?—A. Yes, sir, considerably lower.

By the Acting Chairman:

Q. Not a lower contract? Do you mean a lower day's wage?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. Both a day's wage and contract?—A. Yes.

Q. Lower all around?—A. Yes, lower all around. We have a schedule from district No. 18, that is Western Canada, and we have them from the United States, and they are much lower with our men. These, Mr. Chairman, are the rates, (handing documents to Acting Chairman.)

Q. Dealing generally, Mr. Baxter, and comparing the wages in Nova Scotia with the wages, say, in Alberta,—what percentage lower would you say they were in Nova Scotia? I understand you have to be approximate in a matter of that kind?—A. About thirty-five to forty per cent lower for day's wage men.

Q. And with the competitive field in the States—say the Central Pennsylvania field—what would you say?—A. About the same. Western Canada and the Central Pennsylvania field are on the same rate schedule.

By Mr. Ross:

Q. You are not speaking of contract-men now; you are speaking of day's wages?—A. Day's wages.

By Mr. Douglas (Cape Breton):

Q. I thought you were speaking of wages all around.—A. The contract men on the average would earn more money than our men.

By Mr. Chisholm:

Q. What is that?—A. The contract-men in both of these fields, when they work, would earn more than our men.

By Mr. Cowan:

Q. Supposing you were getting steady work the year round, and they were getting steady work the year round, how would your wages compare?—A. We would be much lower—considerably lower than either of these fields.

By Mr. Hocken:

Q. Have you any figures about the cost of living in the two districts?—A. They are pretty nearly the same in Western Canada and in Nova Scotia; in the United States I believe they are lower.

[Mr. Robert Baxter.]

The ACTING CHAIRMAN: Are there any further questions?

By Mr. Douglas (Cape Breton):

Q. Mr. Baxter, the Sales Agent of the Canadian Pacific Railway gave evidence here, and his evidence was to this effect: That a contract with the Dominion Coal Company in 1912 or 1913 for several hundred thousand tons of coal was two dollars and sixty-one and a quarter cents per ton delivered on board cars at Montreal, and it was for a long ton; and there is also evidence given that the price that the Coal Company was asking for coal delivered in Montreal to-day on the cars, is eight dollars and ten cents per short ton, so that the difference between the proposal of 1912 and 1913 and the present proposal works out about four hundred per cent. As I understand it, you stated the wages have only gone up one hundred and ten per cent—that is correct?—A. Yes.

The ACTING CHAIRMAN: You mean the Purchasing Agent, Mr. Douglas, did you not?

Mr. DOUGLAS: Yes.

The ACTING CHAIRMAN: You said the Sales Agent.

Mr. DOUGLAS: I meant the Purchasing Agent of the Canadian Pacific.

WITNESS: I will be glad to mail you a copy of the schedules.

By the Acting Chairman:

Q. Can you not leave these here?—A. Yes.

By Mr. Steele:

Q. How are the coal cutters employed; by the day or according to production?—A. According to production.

Q. Take the years 1913 or 1914. About how much would a man produce per day?—A. How much coal would he produce?

Q. Yes?—A. Well, if we are speaking of the amount per day for the men employed.

Q. No, I mean the men you call your coal-cutters. Is that the correct term? We are not familiar with these terms—A. I think you had better take it on the average. I would say from forty to fifty or sixty tons per day could be cut by the cutters.

Q. Per man?—A. For a pair of men. They work in pairs on cutting.

Q. Now, you speak of nineteen thirteen, nineteen fourteen and those days?—A. Yes.

By Mr. McKenzie:

Q. Before you leave that; do you mean machine-men?—A. Yes.

Q. I thought that was a large amount for two men to handle with a small pick?—A. Oh, these are machine-cutters; they are cutting by machinery. We call these men "machine-cutters"; when they use the hand-picks, we call them "hand-pick-men."

Q. The Doctor was asking you, and you told him, fifty tons a day for machine men?—A. Two men.

Mr. DOUGLAS (Cape Breton): You had better include the helpers.

By Mr. McKenzie:

Q. What is the average for two men with a hand-pick?—A. For two men with hand-picks, the average would be from five to eight tons.

By Mr. Steele:

Q. Following the first pair through. If they produced forty or fifty tons at that time, how much do they produce to-day?—A. Well, it would be about the same to-day.

Q. You have spoken about the additional difficulties in mining. Does that affect the production of the men per day?—A. The difficulty would be from that point

[Mr. Robert Baxter.]

towards the bottom and not at that point. There would be no greater difficulty with the cutting machinery.

Q. You think they would produce as much to-day as they did four or five years ago?—A. Yes.

Q. It takes them longer to get to their work?—A. Yes.

Q. And they would have to leave their work a little earlier in order to get out?—A. Yes.

Q. They are not getting as long a time at the face of the mine?—A. Yes, but that would make no difference with the company or add to the cost of that operation, because the price is—

Q. I am getting at the quantity which would be produced by a pair of men under these circumstances, whether there is any difference in the amount which they will produce. I think if they are not working at their machines as long per day, they probably would not produce as much per day?—A. That would be quite true if they had to walk a greater distance to their work, they might not produce as much.

Q. How long would it take a pair of men engaged in that work—first of all, when does their day start in the morning?—A. How long at their working-place?

Q. No, when does their day start in the morning?—A. The pay of these men starts when they start at the coal face.

By Mr. Chisholm:

Q. That is, the contract men?—A. Yes.

By the Acting Chairman:

Q. When they start cutting coal?—A. Yes.

Q. If they have to go two or three miles, it is on their own time?—A. Yes. Of course, the point is that if they were walking a long way on their own time, they would not have the energy to cut as much coal as if they had a shorter walk.

By Mr. Steele:

Q. Then they would not take out as much coal?—A. No.

Q. Let us see. These men who load the coal—I think you call them “muckers”—A. No, we call them “loaders.”

Q. How are they paid?—A. They are on a contract basis.

Q. And the same applies to them?—A. Yes, they would load about one-half the quantity which the machine would cut.

Q. What were the wages of the machine-men in 1913 and 1914?—A. From three and a half to five dollars per day.

Q. What is it to-day?—A. Three and a half to five dollars—

Q. I mean the machine men working on contract?—A. That is what I am referring to.

Q. How much were they paid per ton?—A. Oh, it would be around from twelve to fourteen cents per ton.

Q. How much are they paid to-day?—A. Well, I guess they estimate around twenty-nine cents; they average around twenty-nine cents.

Q. The pay of these men has gone up rather more than two hundred per cent?—A. It has not gone up two hundred per cent.

By Mr. Chisholm:

Q. From twelve to thirty?—A. No; it would be from twelve to fourteen—that would be about how it varied.

Q. At that time?—A. Yes. The average would strike at twenty-nine cents, so that it would just be a little over one hundred per cent in the operation.

The ACTING CHAIRMAN: Mr. Baxter has stated, Doctor, that the increase would average around one hundred and ten per cent.

[Mr. Robert Baxter.]

Mr. STEELE: That is for all employees?

By Mr. Cowan:

Q. Was the machinery and equipment installed by the Dominion Coal Company of the very best to enable you to produce coal at the very lowest price? Was the machinery of the best?—A. It is hard to keep it in A-1 condition. The machines are never at their best.

Q. Would that tend to increase the cost of it?—A. Well, it would increase the cost. If you had a bad machine you would get less coal, and less coal would lessen the output.

Q. We are trying to find out whether anything can be done to get this coal on a larger market.—A. Well, I believe that much can be done. I could cite you the case of No. 15 mine at New Waterford. The company had closed down No. 15 mine. Their statement to ourselves is that the cost is too high; the cost is excessive at No. 15. I was down that mine, and it is my opinion that the coal could be mined there as cheaply as in any other mine which they have got, but I believe that owing to the desire to get large quantities of coal when the war was on, they neglected their roadways; they neglected to keep them in first-class condition, so that they came to a period wherein they could not take the coal, owing to the difficulties of transporting it from the face to the bottom. These difficulties were so great that they could not take the coal from the men. There was some complaint from the men because of the low earnings. You see the men are paid so much a ton and if they go down and take the coal and cannot get it away, their wages are reduced, so, acting upon complaints of the men, I went down that mine; I visited possibly ten places, and in all of those places they had a pile of coal and were waiting for boxes.

By Mr. Cowan:

Q. Simply a lack of equipment?—A. Well, the equipment might be there, and the roadway not be in condition. Out at the back they were waiting for boxes, and at the face they were waiting for empty boxes, so the trouble was between the pit mouth and the coal face. The roadway was in a bad condition.

Q. They could be put in good condition with a little bit of expenditure?—A. Since that time, they have expended money on that mine, and the result was, from their own statements, that the cost was coming down steadily.

Q. The other day a statement was made here—this is getting away from the immediate subject—that the sanitary conditions down around your place were absolutely rotten, and that tended toward unrest among the men. Is there any truth in that statement?—A. An awful lot of truth.

Q. How is that handled? Is it under the control of the local Government? Have they no laws governing that?—A. They have no laws of which I know.

Q. Are the houses owned by the company?—A. Mostly owned by the company.

Q. Do the miners own many of their own homes?—A. A small percentage, of them do.

Q. Has any attempt been made to modernize these homes?—A. No; no attempt in recent years. We have talked it over with the company, and in some of the discussions they were favourably disposed to put in improvements, but in the later discussions they told us "This slump has come about and we have not the money to spend on these proposed changes."

By Mr. Douglas (Cape Breton):

Q. About all they did was to put a coat of paint on some of the houses?—A. Yes.

By Mr. Cowan:

Q. Do I understand these houses are not modern at all—have they water closets?

—A. No. We have outside houses—dry water closets.

[Mr. Robert Baxter.]

Q. How big a place is that?—A. About three and a half by five feet—

Q. No, I mean the site of the town. What is the population?—A. Glace Bay has a population of upward of sixteen thousand; the bulk of the people are working for the coal mine.

By Mr. Hocken:

Q. Have they a sewage system?—A. In the town proper they have, but not at the mines.

Q. Have they where the miners live?—A. No.

By Mr. Cowan:

Q. Are the people not required by law to connect their homes with the sewerage system?—A. No.

Q. In our town you are compelled by law to connect your homes with the sewerage. Have you no such law down there?—A. No.

By Mr. Hocken:

Q. Have they a water system?—A. Yes, they have had for the last seven or eight years.

By Mr. Steele:

Q. What changes have the men asked for?—A. They would like to have modern conveniences; they would like to have toilets in their houses. They would like to have a sewage system and other accommodations. If that were accomplished, we could beautify the place a lot. The statistics have proven that the infantile mortality in Glace Bay is the highest in the Dominion of Canada.

By Mr. Cowan:

Q. And is your Provincial Government allowing that to continue?—A. We have taken it up with the authorities at Halifax, and they told us they were shocked to learn of this. They sent down Dr. Hattie, who is the Health Officer for the province, but nothing was done.

Q. Do you not think you had better move your Parliament Buildings to Sydney for a while?—A. Or move to Ontario where they have all these good laws.

Mr. COWAN: That is shocking.

By Mr. Steele:

Q. Are the houses fairly comfortable, apart from the absence of toilets?—A. No, I would not say they are fairly comfortable.

Q. How large is the average house? How many rooms?—A. Six-roomed houses.

Q. One story?—A. It has always been held as a sort of public opinion that anything was good enough for a miner, and seemingly it has not died out. I guess the condition can be duplicated almost anywhere in mining sections.

By Mr. Douglas (Cape Breton):

Q. I do not know if you are stating what is correct, when you say "public opinion". Do you not think it is that the companies feel that way?—A. It may be. I am making the statement, coming from the Old Country. It is a very pronounced there, and although it is not so pronounced here, yet it is here just the same. There is a certain amount of it, but it is very pronounced in the Old Country. Another very important thing is that there should be no more mines opened out than can supply the markets. If you open more mines than would be necessary to supply the market, the consequence would be that some of them would be idle at some time, and to be idle at some time would add to the general cost of coal. I believe the Provincial Government should have a law wherein there would be no new mines opened out unless the mines already opened out cannot supply the market. I believe the

[Mr. Robert Baxter.]

reverse is the state of affairs in America. They have almost forty-five per cent more coal mines than there is any necessity for. We should provide against that, and if we are developing our coal trade, we should see to it that the greatest amount of the coal mines in operation should reach the maximum before new mines are opened out.

By Mr. McKenzie:

Q. How do you account for the tendency of the company to open more mines than can be kept going?—A. Maybe the companies would not open new mines, but other companies would come in.

Q. Take the Dominion Coal Company: Do you think they have more mines than they should?—A. I do not think they have more mines now, because we have been asked to supply the market here, until this spring, but I notice you are desirous of developing the coal-fields in Nova Scotia and I would say that they should be developed by not opening any new mines until those already opened have reached their maximum, and there is the difficulty of meeting the demand. Then new mines should be opened. It would be a saving of cost, and it would be a protection to our men working in the mines.

By Mr. Steele:

Q. Supposing this situation should develop, Mr. Baxter under these conditions, that a dispute should arise between the large operating companies and the men, and strike were called, and production ceased. What about the consumer?—A. If we had looked at it that way we would not have allowed the merger to go through.

By Mr. Chisholm:

Q. What is that?—A. If we had looked at it that way, we would not have allowed the merger to go through.

By Mr. Steele:

Q. You are appreciating the fact that the consumers, of course, must be looked after always?—A. Yes.

By Mr. Cowan:

Q. You are assuming, I am afraid, that the corporations or the operators are the ones who are always the cause of the strikes. It may not always be so. I have seen strikes where I have thought the men were wrong.—A. I am not saying we are angels without wings. Sometimes there are mistakes made by the men, but on the average the men are right.

Q. I notice you say that with a smile—

The ACTING CHAIRMAN: Are there any further questions you wish to ask Mr. Baxter.

By Mr. Douglas (Cape Breton):

Q. Can you give me some evidence in regard to costs, how, in your opinion, and where can the most reliable data be obtained in regard to the actual cost of the production of coal? You are free to admit that yours are no more than an approximation?—A. Yes.

Q. You would not undertake to swear that they are absolutely accurate?—A. No.

Q. We are endeavouring to obtain accuracy. What method should we resort to in order to obtain accuracy?—A. The books of the company would, in my opinion, be the most accurate method of getting at the cost.

Q. That would be the original cost sheets?—A. Yes.

[Mr. Robert Baxter.]

By Mr. Cowan:

Q. There has been no evidence that you have seen that the company has precipitated the present conditions in order to force down wages?—A. No, I would not say that. We have looked at it to see if there was any evidence that way, but when we see that conditions in Western Canada, and in the coal mining sections of the United States are just about as bad, we conclude that it is a general state of affairs.

Q. Have you noticed that the fact this merger has been consummated has had any deleterious effect?—A. No, my answer will be the same.

Q. There has been no evidence of any change in policy or anything of that kind?—A. No, the depression had come about at the time the merger went through.

Q. It was a coincidence?—A. I would think it was a coincidence.

By Mr. Chisholm:

Q. You would not expect the result from this merger to be known, as it is only a couple of weeks since the merger was consummated?—A. No.

By Mr. Douglas (Cape Breton):

Q. Mr. Baxter, from a labour standpoint, if a man is dismissed at one colliery—take the Dominion Coal Company—the result is that he finds it pretty difficult to obtain employment elsewhere in the same company.—A. It would depend upon the crime he had committed. There was one period when if he had committed the crime of organizing the men, there was no work for him anywhere in the province, but recently there has been very little of that.

Q. But generally speaking, if a man is dismissed at one colliery, he is not likely to find employment at another colliery from the same company? Is that not a fact?—A. Well, I do not remember any cases of that nature for a long time.

Q. But that has been the rule before now?—A. Yes, it was the rule at that period.

Q. When all these companies operate under one merged concern, would it not follow, from a labour standpoint, that it would be detrimental to the miners generally?—A. That would be a weapon which they possess now, and if they wanted to use it, it would have a great deal of effect on the men.

Q. There the effect would be, if they wanted to use the weapon, that the Nova Scotia miners could be driven away from Nova Scotia, and forced to obtain employment elsewhere?—A. That is the possibility.

By Mr. Chisholm:

Q. Do you see any good features in this amalgamation from the labour standpoint?—A. No, we do not see any good features, and yet some of us who study economic can foresee that this is the order of the day, that mergers will take place, and the trusts are going to be formed, and monopolies are going to be the rule, and my opinion is that the steps the Government has taken are proper ones, and when it becomes so, they are such a force that the Government has got to step in and make regulations the Government has to take action such as you are taking now to regulate these things when you see the possibilities of great conflicts and the possibilities of evolution. That is just an opinion of my own.

By Mr. Douglas (Cape Breton):

Q. Do you see any justification for bringing the Halifax shipyard into the merger?—A. I do not see any justification. If the Halifax Shipyards had been building ship for the merger; if they had had ships in the coal trade and so on, I would have seen justification for it, but I understand—Oh, yes, the Shipyards have been building ship.

Q. Does it not all come out of the coal after all? I suppose you noticed that the evidence was given that the Dominion Steel Company got their coal at one dollar and fifty-five cents from the Dominion Coal Company, so that the steel interest are largely dependent, as far as their business is concerned, on the Coal Company.

[Mr. Robert Baxter.]

and because of the low price, the Halifax Shipyards would be dependent upon the success of the coal. Would you not consider that all these things are attached to the coal, and consequently the Coal Company has to pay for the other concerns?—A. Yes, it is possible that they could camouflage conditions by having connection with all these things. At one time the Coal Company had contract with the Steel to supply coal at a dollar and a quarter a ton—to supply coal to the Steel Company. Now, the coal miners would go into negotiations with the operators, and they would say that a certain percentage of their coal was sold at a dollar and a quarter, and they would cite the cost as being so-and-so, and compare it with this percentage of low-priced coal, and of course, confining us to coal, it would defeat our objective in getting an increase in pay.

By Mr. Cowan:

Q. Do you suppose they were then selling this coal to the company below the cost at that time?—A. Yes, I believe they had very little margin on the coal when they sold it at that time, and I cannot see where it was material to them how they sold it, because it was all the same company. If they took it out of the coal pocket and put it into the steel pocket, it was the same company just the same.

Q. Provided they were giving the consuming public the benefit of the steel?—A. Providing they were giving the consuming public the benefit of the steel, yes.

By Mr. Douglas (Cape Breton):

Q. That would not do the miners very much good?—A. No. If we, by hook or by crook, were forced into the condition where they could live and live easier by getting profits from some other company, and would sell our products to this other company, and be able to say, "Now, here is what we get for this coal, and because of this low figure we want you to adjust your wages accordingly"—that would certainly not be fair to the coal miners.

By the Acting Chairman:

Q. Is that not your position, to a certain extent, to-day in relation to this low price to the Steel Company?—A. Yes; but in our negotiations we have refused to accept the low price to the Steel Company. We have refused to be influenced by that.

Q. Nevertheless, it is a factor in the output of the mines? That is, we have had a statement made here by a large purchaser that they are prepared to enter into a contract with the Nova Scotia people when their price was what they think should be paid; in other words, they claim now their prices are out of line and they cannot buy coal. That is affecting you?—A. Yes.

Q. The fact that they are selling a large proportion of their coal at this reduced price makes it necessary for them to get a high price for the coal sold to others?—A. Yes. That is something for this Committee to see about when they get the cost sheets, and you should be like ourselves, when we are negotiating, and not to recognize the low rate that would be made with some other sections of the company.

By Mr. Cowan:

Q. What beats me is that under the natural conditions in these mines, they could produce coal a while ago at a dollar and a quarter—just a few years ago—and now, under almost similar conditions, and from the same mine, they say that the cost is such that they must require at least seven dollars a ton.—A. Of course, dealing with coal going to the Steel Company we should always remember that the biggest amount of that coal is slack coal. Slack coal is good for making coke, and they use a lot of it. They take a lot of their slack to Sydney and make coke out of it for steel purposes. This slack is always lower in price than the run-of-mine, or steam coal.

[Mr. Robert Baxter.]

By Mr. Chisholm:

Q. Supposing that the Steel Company were not there at all, what, in your judgment, would be done with the slack coal?—A. It would be difficult to market the slack coal.

Q. So that is one feature which justifies the existence of the Steel Company?—A. Yes, they have steady employment in the winter time since the Steel Company went into operation. It would be good for the province if the steel would prosper; it would be of much help.

Q. It would be good for labour too?—A. Yes.

By Mr. Cowan:

Q. That is admitted everywhere.—A. It would help the coal trade, and should allow the company to produce at a lower cost, because it facilitates their working operation—in working in the winter time—and working all the year round should give them the lowest possible cost.

By Mr. Chisholm:

Q. Before the Steel Company was inaugurated, was continuous labour furnished?—A. No, I think they had a seasonal occupation. I was not in the province at that time.

Q. But you are familiar with it?—A. Yes, I am familiar with it. They laid off in the winter and worked in the summer. We must admit that it is beneficial to the province as well that the steel end should go on if possible.

By Mr. McKenzie:

Q. Mr. Baxter, I would like to follow up this handling of the coal a little farther, because we have a couple of gentlemen on this Committee who think we should give our Nova Scotia coal away for nothing, and I want to keep coal valuable so that our men who are handling it will be able to get good wages. Now, they seem to think there is nothing to it, but to cut down a lump of coal and throw it in the box and that is the end of it, and it is in the market right away. This morning you have gone through several of the stages through which this coal goes; first you cut it, and then it is shot down and loaded into boxes, and hauled out to the main haulway by horses and then you have the endless haulage in some places.—A. Yes.

Q. And you pass through the endless haulage there?—A. Yes.

Q. Then it gets to the pit boxes?—A. Yes.

Q. Then the pit boxes are put into the cage?—A. Yes.

Q. And then they have to handle it at the bottom?—A. Yes.

Q. Then they get to the bank head?—A. Yes.

Q. After they get to the bank head, what more handlings are there before it gets to the ship?—A. After it gets to the bank head, it is dumped over a tippie, and after it gets over the tippie it goes on a travelling belt, and as it goes along, they have several men along that belt picking out the impurities, such as slate and brass and stone, and then it goes along this belt over the screens, and when it is screened, there is about thirty per cent separated from the bulk as slack. When it goes through the screener it is slack, when it does not, it is run-of-mine, and it goes over just as it comes out of the mine.

Q. Then from that belt it goes where?—A. Into the cars.

Q. And then the cars are hauled—A. The railroad section handles it and takes it to the piers where it is dumped into the ship, and trimmed and made ready for the voyage.

Q. Then, of course, the trainmen have to handle it?—A. Yes.

Q. Take it to the piers?—A. Yes.

Q. Then there are the men working on the piers?—A. Yes.

[Mr. Robert Baxter.]

Q. And the trimmers are down in the ship trimming the coal?—A. Yes. The trimming costs about six and a half cents for some boats. Bunker coal goes to twenty cents to put in, and well, there are other classifications too numerous to mention. Of course, there are many ships around these piers, and you might double these rates and it might not affect the total cost.

Q. Whatever they are doing, the whole thing falls back on the coal?—A. Yes.

Q. It must all come out of coal?—A. Yes.

Q. Nothing else produces anything?—A. Nothing else; it is all the coal.

Q. So, whether a man is a trimmer or a driver, or a bank head man, or a bottom man, or a horse-driver, or a man who looks after the gas, everything must come out of the price of coal?—A. Yes. We have many carpenters, and their price comes out of the coal; machinists who are making the parts and repairing machines, the men on the forges who sharpen the picks and straighten and adjust the tools, and the machine shop—in Glace Bay there are five hundred to six hundred men employed in the machine shop. All of that comes out of the coal.

Q. There are a great many people engaged about those mines in the production of coal that the ordinary man sitting here would not think about at all—a man here who knows nothing about coal mining—A. That is true.

Q. These machine shops: the ordinary man would not think there was any necessity for large machine shops where you would have so many men working?—A. A lot of men in the district hardly know that we have these big machine shops.

Q. Now, it has often struck me, Mr. Baxter—what is the ratio between the producing and the non-producing man? I only call a producing man one who wheels coal. Take that ratio: how would you say it stands, as between the producing man and the army of men who are non-producers, but are necessary to the work? What would you say as to the ratio?—A. Some mines have two to one, and some have three to one.

Q. That is, three men producing nothing, to one man who is producing?—A. Yes.

Q. That, of course, has a tendency to swell the cost of coal?—A. That does swell up the cost, because you can figure it out; in the coal fields that produce coal cheaply, the non-producing percentage is lower as against that section where the non-producing percentage is higher. There you get your difference in the cost.

Q. Now, Dr. Cowan mentioned about these houses: I have often noticed these very small houses which we have at Sydney Mines, those old brick buildings which were built nearly an hundred years ago. You have no such small buildings as those at Glace Bay, have you?—A. No.

Q. You have none of those old-fashioned "rows," I think you call them?—A. No.

Q. How are the buildings at Sydney Mines, as a rule, taking them all in all? How are they? As good or better than in Glace Bay?—A. Well, of course we have a higher percentage of men at Sydney Mines who own their own homes, but outside of these roads, the houses would be much the same at Glace Bay as the company houses.

Q. Well, they should have no great difficulty in improving the sanitation in Sydney Mines. There is a good chance of drainage there—better than at Glace Bay?—A. Yes, they should co-operate at Sydney Mines better than at Glace Bay, because the sewerage system is quite convenient to the company houses, and the connection would be quite easy.

Q. Now, coming to this general question, when the coal price is settled, and the proper price fixed, it gives you a leaver to ask for better wages, does it not?—A. Yes.

Q. You will be encouraged to ask for more money if they are getting more money for their coal?—A. Yes. We are always considering that, because the standard of living is lower than it should be. We ought to raise, and we are working to raise our standard. It has often been said that when they get an increase of wages that they do not put that increase in the bank, and that fact has been deplored, but there was a use for that increase with the miners, and many of them had to spend their small earning over as far as possible, so that everyone will get a portion, and when they

[Mr. Robert Baxter.]

get an increase, instead of putting it in the bank, they put it to a better use. They possibly clothed their children better, possibly fed them better, and possibly gave them a better education. Take a man with a large family, it often happens as they are growing up and they are getting to a workable age, the necessity of having them at work is great, and they try to get them away from school before they have a sufficient education, simply because the earnings of the bread winner or the father is not sufficient to give them the standard of living they desire or should have, and the general public, if they understood this matter, would have less complaint against the workers that they did not put their money in the bank.

Q. We in Nova Scotia sell certain things. We sell apples. We are an apple producing country, we are a fish producing country and a coal producing country; is it not natural that we should like to see those things selling at a good price?—A. Yes, it would be to our interests to see the material that we produce get its correct value.

Q. There is at least then a chance for the man who is working to get good pay—a better chance than if it were selling at a low price. Is that not the fact?—A. Oh, yes, it would give him a better chance.

By Mr. Cowan:

Q. Supposing the price were too high, he could not sell it in competition?—A. That would be the danger point.

Q. You cannot get a price above the competitive price. That is where we are at all over the world in everything, is it not?—A. Yes, but sometimes our coal has been selling at less than competitive prices.

Q. That was during the war?—A. Yes. It did not go as high as coal went in the United States.

Q. And of course that time has passed and we have got to get down to common ordinary competition.

Q. And the thing is how are we going to get Nova Scotia coal sold under these conditions?—A. Yes that is a good point, doctor; that is one we should balance out with the other.

Q. Is your working man prepared to discuss these matters with your company on all occasions so as to try and arrive at a price that will sell your coal?—A. No, we have usually left that with the company.

Q. And you have never made any effort to get the company to consider these matters with you so that you could arrive at a mutually satisfactory agreement up until the present time?—A. The advantage has always been with the company, and there was never the necessity to balance out.

Q. Would you consider it beneath your dignity as a body of workmen to ask the company to come to a conference to discuss these matters with them and see if a mutual agreement cannot be arrived at?—A. We would feel dignified in asking the company to come along and discuss it with us, because it would be an honour that we had created for ourselves.

Mr. DOUGLAS: I do not know as the witness exactly understands your viewpoint. You desire to bring out the point as to whether or not negotiations are held from time to time between representatives of the men and representatives of the company, with a view to arrive at an arrangement with regard to wages.

By Mr. Cowan:

Q. The representative of the company the other day, in reply to a question of mine, stated that they could not ask you to come to conference, that the initiative would be by your men?—A. Was that not in reference to reducing the cost at the wage end?

Q. Yes, it would really apply to everything in connection with the production of coal?—A. We are willing to come and negotiate in everything but the wage end,

[Mr. Robert Baxter.]

and in talking with officials of the company we have said we were ready at all times to meet them and assist them in lowering the cost, joining with them in co-operation to lower the cost, and I believe there has been progress made along these lines. We have talked about methods of operation, and we have adjusted matters in several instances with a view to lowering costs. We met in negotiation and we have submitted to less increases than others in other mines. The rest of the miners on the North American continent almost, got 27 cents added to their ton rate. We in Nova Scotia only got 10 cents added to our ton rate, simply because the competitive conditions were taken up and described, and we at that time consented to it.

Q. It is quite evident to me from the evidence given that if you would reduce the price of your coal on the Montreal market about 70 cents a ton, that you would be able to displace a very large amount of American coal sold in the Montreal district. In your opinion, is it possible to reduce the price of coal 70 cents a ton so as to get that market?—A. Well, I see by Mr. McDougal's statement that he thinks with the merger the cost will be reduced, and I believe he is right in that. The Florence mine at Sydney Mines, No. 3—I was down that mine, and it took us two and one-half hours to get to the working base, and of course it would be a difficult operation getting there, because the height of the roadway would not be more than from the floor up to the top of this table, and we were sometimes striking ourselves on the booms overhead. It took us two and one-half hours to walk the distance, but with the merger they would be able to get their coal right at the side of the slope. The coal at the other side of the slope, right handy, belonged to the Dominion Coal Company. It was into their lease, and with the merger they will be able to break in that field and get the coal that much handier. It will take about an hour and a half off the walk of the men.

Q. I said 70 cents per ton. My attention is drawn to the fact that there is a difference of only 20 cents a ton in the Montreal market between the American price and the Dominion Coal Company price, which means you would only have to reduce it about 20 cents per ton in order to be on equal terms in Montreal. That is the problem before you, how are you going to meet that small margin, so as to meet the competition of American coal?—A. We are in hopes that when you get the cost of the companies, you will find the companies have margin enough to allow them to take off this 20 cents or more.

Q. I understand it is a fact that this merger as you call it has been very heavily capitalized, and of course they have to pay interest on that heavy capitalization. Is that going to be all charged up against this coal in the assumption of your organization, and will it have any effect?—A. I would camouflage their earnings. It would make a lot of watering, that is true; it would come down to a matter of bargaining with the company, and the destruction we might be able to do to their earnings. That would be taken into consideration in future negotiations. A strike destroys the profits for the time being.

Q. What does seem to me is this; that with only from 20 to 40 cents a ton lower price necessary in order to capture a great big market, that you people down there are surely equal to the task of overcoming that?—A. Well, if we leave it at that end of it; we cannot recognize that at the wage end. It would just work right in this way—

By Mr. Douglas:

Q. That is on the watered stock end?—A. If you are able to accomplish it with better management and efficiency in running the mine, or if you can take it out of the margin of profits well and good, but, say we decided to take it out of our low wages to get more work, we might get it, but what is to hinder the American coal field pursuing the same policy, and if they pursued the same policy, we would find ourselves in the self-same condition, with a lower cost and lower wages and just the same amount of work.

[Mr. Robert Baxter.]

By Mr. Cowan:

Q. I think you are not justified in taking that view of it, because as I see it the Americans are producing coal at so low a rate that it would be utterly impossible for them to produce it lower than at present. I think they have got to rock bottom, and they cannot cut down anything?—A. I do not think you have got my point in reply, and that is that you suggested, or I took from your suggestion the matter of 20 cents on a ton of coal would be a small matter for us.

Q. I did not mean to make any such suggestion. You take your part of it, and the company agreeing also to take a part of it, that between you somehow or other you could come to an understanding whereby for the time you could sell coal in the Montreal market, and thereby get a footing there again. Once you get a footing there I do not think you would have any difficulty in holding it?—A. I can cite you a condition of affairs after the American civil war. The American civil war was finished, and they were just in the period after the war that we are in today. In order to carry on the war successfully the North had depleted their coal mines. They were small coal mines at the time, and there was a military necessity for the coal, and they developed the mines while the war was going on, but after the war was over the country found itself with more coal mines opened up, or with a greater production of coal than they would need to consume, and the consequence was that each individual company entered into a out-throat policy on the price of coal, and the result was that they asked labour to come down in price. Labour seemingly came down because they were unorganized. It is reported that at that time the children of the miners were actually eating out of garbage cans. I think the statistics proved that the coal companies were making no profits, and the miners were not getting a living wage. That all originated from the policy that had been in operation, so that I would not recommend such a policy to-day. I would just say in conclusion that I think it would be well if this committee could do something to have the Government take some coal from the province to relieve the situation. As it now is, many families are in dire need. We as an organization are loaning out every dollar that we can bring together in order to give them something, but the something that we give is not near sufficient, and if some policy or some recommendation from this committee to carry things over until an official settlement was adopted, I believe the committee would be doing a service to our province.

By Mr. Cowan:

Q. You mean the Government railways?—A. Yes.

By Mr. Steele:

Q. The Government is not directly purchasing coal?—A. No, but the Government has influence with the Canadian National Railways.

Q. No, that is separate. That railway is run like any other railway, by a board of directors. The Government can give advice?—A. It was advice I was referring to.

By Mr. Keefer:

Q. Does that apply also to the C.P.R.?—A. We do not care, wherever your influence extends, we ask that you will take coal from Nova Scotia in order that our men producing it may get wages; that is our desire. We understand that at the present time the Canadian National Railway is not taking its normal consumption.

Mr. KEEFER: Because of the price, we are told.

Mr. DOUGLAS: The information we have at this moment is that they closed with a number of the coal operators yesterday.

By Mr. Keefer:

Q. Is it true that the price of coal has dropped within the last two or three days? Do you know anything about the price of coal?—A. No.

[Mr. Robert Baxter.]

Q. Do you know anything about the price of bunker coal? That it has dropped a couple of dollars since this committee has been at work?—A. I did hear a statement from an official of the coal company that they had dropped the price of bunker coal in St. John harbour.

Q. How much?—A. \$2 a ton.

Q. I am very glad to hear it. That has been the difficulty in connection with those people buying, the rather high price.—A. Yes. I heard them make that statement.

WITNESS retired.

Mr. Steele having taken the chair.

The CHAIRMAN: We will now hear from Mr. McLachlan.

J. B. McLACHLAN called, sworn and examined.

By the Chairman:

Q. What is your occupation?—A. I am Secretary for the Miners' Organization. The United Mine Workers of American, District 26.

The CHAIRMAN: Are there any questions that the committee wish to ask.

Mr. KEEFER: Perhaps he can make a statement.

WITNESS: I have a copy of the increases here. I think they may be of some use.

By Mr. Cowan:

Q. Increases of what?—A. Increases in the wage rates.

By Mr. Chisholm:

Q. Since when?—A. Since the year 1909 to the present. I want to say in starting out that in the year 1909 the Dominion Coal Company posted up two notices which carried a re-adjustment of the wage rates. One of those notices was called schedule No. 1, and the other schedule No. 2. Both of them meant I think a reduction to the men. The men asked for a board under the Industrial Disputes Act, and a conciliation board was appointed, and out of that conciliation board was this first contract called the Short Board Award. That contract continued from the year 1907 to 1918. There were supplementary agreements made as new mines were opened up, for instance, 12, 14, and 16, and one 22 Birch Grove. These mines were brought under this contract. In the year 1913 the contract was extended for a period of three years, and in order to clarify this thing I may say that at that time there were two labour unions in the province and very bitter feeling was running between those two labour unions, and in order to pin the men down to a rate which a very large number of them considered an unreasonable wage rate, this agreement at the end of 1916 was again renewed on the 27th day of May. The old agreement did not expire until the end of the year so that they actually got the men to agree to a wage rate for seven months in 1916, when the cost of living was going up, before the old agreement expired. This organization, which was outside of this agreement, made considerable progress. As a matter of fact, they got the larger number of the men inside their organization, and we forced the company to break their agreement. We repudiated it. We said the agreement was never submitted to the men. The men had never anything to do with it. A few men got together with the coal company, and fixed this agreement, which was entered on on the 27th of May, 1916, and was the first increase that the miners received from the year 1905. It states here (reading)

"It is further mutually agreed that a 10 per cent increase shall apply to all contract mining rates and day rates at the mines, and contract and day rates at the piers, 6 per cent of which increase is to become effective and will

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be paid from the 1st of June, 1916, and the other 4 per cent to become effective and to be paid from the 1st of January, 1917, and to continue until the 31st December, 1918."

That contract was never carried out. The next board—the war being on, I take it the Government did not want to see any tie-up or any trouble; neither did the men, but they wanted a wage out of this industry, and the Government appointed what was known as the Chisholm Commission. Judge Chisholm of Nova Scotia was the chairman of it, and that Commission gave a further increase of $12\frac{1}{2}$ per cent on the coal-cutting rates and on the day rates. They gave the day-paid men 10 cents plus $12\frac{1}{2}$ per cent. The contract ran from May, 1917, to December, 1917, or in other words six months. It also brought those two unions together, so that there was only one labour organization left. Again in January, 1918, there was a six months' agreement made, and a further $12\frac{1}{2}$ per cent given to contract men, and 15 cents a day plus 15 per cent given to the day rate men. Now, I want to say a word in connection with this day rate. The old organization previous to the incoming of the present organization was largely composed of what we called the higher paid men. The men were making good wages, and the lower paid men, some of them were down at the end of the short pier and getting \$1.38 a day, we were not being taken care of.

By Mr. Cowan:

Q. \$1.30 a day?—A. \$1.38 a day. That was in the year 1908, and we understood that the increase was larger, that the percentage of increase was larger for the day-paid men, so that they got 15 cents on their day rate, plus 15 per cent, while the contract men only got $12\frac{1}{2}$ per cent. The next agreement was made six months after that. In June, 1918, we got 20 cents a day for the contract men. That is, there was a local understanding that the number of tons that a man would produce, 20 cents would be distributed over those tons, so that if he produced five tons, then it would be 4 cents on the ton, and so on. The day-paid men got from 20 cents to 30 cents a day. The next agreement was brought about in February, 1919, and under that agreement we got an eight-hour day, but no increase in wages. We were asking for an increase in February, 1918. I have included that contract in there. There was also a certain contract drawn up in 1918, that is with the International Union. The United Mine Workers of America was fighting for the local organization that prevailed at that time in Nova Scotia, and there was an agreement drawn up then, that agreement dealing with the mine workers coming in, every word of it, was drawn up by the operators themselves. In January, 1920, we attempted what we termed a levelling-up process; that is, some of the coal companies in Nova Scotia, were paying one rate for say common labour. Some of them at that time, I think, were paying as low as \$2.85.

By Mr. Cowan:

Q. \$2.85 a day?—A. Yes, for common labour.

Q. What was the raise—\$2.85 to what?—A. It was approximately 10 per cent, I think, that the McKinnon agreement would amount to. Some of the coal companies would not give anything at all. That is, they were not entitled. We were asking for a day rate on common labour of \$3.25. We asked that because some of them were already paying it. Others were not paying it. We called it a levelling up, to put the operators on the same competitive basis, as far as wages were concerned. That is what we attempted at that time. The McKinnon award provided for a reopening of the wage rate each four-month period in the event of any change taking place in the cost of living, or any economic disturbance or any disparity in Nova Scotia. The reason for that was this: In the spring of that year the miners in the United States were looking for a substantial increase; I think \$1 a day.

[Mr. J. B. McLachlan.]

By Mr. Cowan:

Q. That was in 1920?—A. Yes; January, 1920. The men in the United States were asking for \$1 a day increase and so many cents on the ton, and there had been a strike, and the President of the United States issued a commission to inquire into the matter, and there was some probability that the miners were going to succeed in getting a large increase, and we pointed out to the coal companies that that was going to change the competitive selling price of coal, and that we were not going to tie ourselves up for a year or six months; that we wanted to be open to come back if the miners in the United States succeeded in pushing up the wage rate, which would result in putting up the market price of coal, and we expected, as business men, that they would put up their selling price of coal to a competitive point, and that agreement was a four-months' agreement. That brings us down to the present agreement we are working under now, known as the Montreal agreement. It runs to the last of November this year, from the first of November last year. We got 10 cents per ton on the rates that prevailed in November last year, and on datal periods to be advanced 55 cents per day above the present schedule rates, and all local contract rates to be advanced $12\frac{1}{2}$ per cent over those in existence at the present time. I want to say a word or two about those advances. On the face of them it would appear that we got 10 cents and 55 cents a day for our men. That would appear on the face of it, but that is not true. There was a deal of smart practice carried on by the coal companies in putting the contracts through. They inserted a clause there in the contract; they put in the word "schedule" and they took this schedule—

By Mr. Douglas:

Q. What is this document?—A. This is the day rate schedule.

By Mr. Cowan:

Q. I want to know what they are making per day?—A. That is the rate there in the schedule. That is the present day rate schedule.

By Mr. Douglas:

Q. Of the Dominion Coal Company?—A. Yes.

By the Chairman:

Q. It covers the Nova Scotia Steel and Coal Company?—A. No, this does not cover the Nova Scotia Steel and Coal Company. I was going to say about the application of these increases, it had always been customary, a man is paid so much a ton; if he is working in a narrow place—that is in a 12-foot wide space—he is generally paid yardage. He gets so much for putting up each boom, probably 50 cents or probably 75 cents for a larger boom. The larger the boom, and higher the price; that is across the roof. It had almost always been customary from 1917 to apply the increases of each item to booms, ton rate yardage, and everything a man was paid for, but on this occasion they only gave us 10 cents a ton, nothing on booms, and nothing on yardage, because they said "it is not written in the contract." Another item I want to point out; in order to get men to do what we call special work, where it requires a first-class mining man; their shift men are generally men that are either coming into the mine or men who are going out of the mine; that is why old men who have done a little bit, and they are finishing up in a year or two; or young strong men going into a mine, and where there is special work like timbering main deeps, they have to get a man out from the coal working face and pay him a rate quite different from the schedule rate. They are paying from \$5.50 to \$7 a day; that is what the men could get on the work, but they took them out, and they said, "We promised to pay you that, but it was not written in the schedule." These men did not get the 55 cents, because of the dull period, they were reduced from \$7 to \$5.05. That was the kind of increase they got under this award. That

[Mr. J. B. McLachlan.]

affected quite a large number of men. The miners did not get their 12 per cent on their yardage, and it was a second consideration on the part of the coal companies to withdraw this. They actually paid it the first pay, and the times were beginning to get bad, and this thing was beginning to be applied, and they withdrew it. And the men would fight, and they would fight in dull times, and we did not propose to allow them to drag us into a fight on that question. I want to give one example of the increase over 1908, the Mackinnon Conciliation Board. I take the Calidonian Mine. All the rates remained the same from 1908 and this statement—

By Mr. Douglas:

Q. That is a comparative statement of coal cutting rates, 1908, 1913, 1916 and 1920?—A. 1921.

Q. Of the Dominion Coal Company's mine? No. 4 mine?—A. That is the Calidonian Mine. That is a typical mine. Probably the best miners in Canada work in that mine. The fathers are working in it and the oldest class of Scotch immigrants probably that are in Nova Scotia, worked in that mine. The rate you will notice for cross-cut construction, and pillars and machine men is not given under the year 1908, but the rate in 1913 is exactly the same, and the reason I have not given it there is because it was not given in the Ship Short Board award. It was written in the schedule.

Q. A rate is given here for 1913 and they have not the price of the sales of coal back further than 1913. We start with the 1912-13 sales of coal?—A. In 1913, for cross-cut construction they give 51 cents, 1920 99 cents—that is under the present arrangement—or an increase of 94 per cent. They give a footage or yardage or 32 cents per foot in 1913, and they have to-day 55 cents, or an increase of 69 per cent on that item. The price for footage goes up; for every 30 feet they were paid 74 cents in 1913 and to-day they are paid \$1.25 or an increase of 68 per cent. Then as to the pillar work; this is all hand picked mining down to the end.

By Mr. McKenzie:

Q. When you speak of pillar work, is that the lowering of pillars?—A. Yes. Pillar work was paid 45½ cents in 1913, and 89 cents in 1921, an increase of 99 per cent. That was the minimum, and they had a maximum rate of 48 cents, and the present rate is 94 cents.

Now with regard to machine mining—and that is where the majority of mining is done, I would say they got the major part of their coal from their machine mines. Rooms undercutting in 1913, were paid 13 cents a ton; to-day 26 cents a ton, or an increase of 100 per cent. For shooting and loading they were paid 28 cents in 1913, and in 1921 they were paid 61 cents, or an increase of 118 per cent. For the total operations in that room, undercutting, shooting, and loading, they were paid 41 cents in 1913, and in 1921 they were paid 87 cents, or an increase of 112 per cent. I want to say that most of the men now-a-days do the three operations; that is two men come in and complete the three operations, so that their increase is 112 per cent and not 118 per cent as is shown for shooting and loading. The men undercutting do the three operations, not in all cases, but a number of cases. Then as to the narrow work in deeps, undercutting and shooting—I do not appear to have that rate down here. Oh yes, I have it, undercutting, shooting and loading 47 cents in deeps; that is a narrow place going down hill. In 1921 it was \$1.03, or an increase of 119 per cent. That is what they call one of the loading places. There may be one in 10 or one in 12. Then headways, undercutting and shooting in headways 30½ cents, to-day it is 65½ cents or an increase of 115 per cent; the total 45 in 1913 as against 100 in 1921, an increase of 122 per cent, and the levels are the same.

[Mr. J. B. McLachlan.]

Mr. DOUGLAS: This statement which the witness produced is concrete and well prepared, and I think should be filed.

The CHAIRMAN: Yes.

The statement reads as follows:

COMPARATIVE STATEMENT OF COAL CUTTING RATES FOR THE YEARS 1908, 1913-1916 AND 1921. DOMINION COAL COMPANY'S MINE No. 4

Classification	1918	1913-16	1921	Percentage of Increase Per cent
<i>Hand Mining—</i>				
Rooms.. . . .	....	\$0.51	\$0.99	94
<i>Cross-cut construction—</i>				
First 12 feet per foot.. . . .	....	0.324	0.55	69
Next 8 feet per foot.. . . .	....	0.456	0.76	67
Next 10 feet per foot.. . . .	....	0.55	0.93	69
Over 30 feet per foot.. . . .	....	0.742	1.25	68
<i>Pillars—</i>				
Minimum.. . . .	....	0.455	0.89	99
Maximum.. . . .	....	0.485	0.94	94
<i>Machine mining—</i>				
Rooms undercutting.. . . .	....	0.13	0.26	100
" shooting and loading.. . . .	....	0.28	0.61	118
" total.. . . .	....	0.41	0.87	112
<i>Narrow Work—</i>				
<i>Deep undercutting and shooting—</i>				
Loading.. . . .	....	....	....	....
Total.. . . .	\$0.47	0.47	1.03	119
<i>Headways undercutting and shooting.. . . .</i>	....	0.305	0.655	115
Loading.. . . .	....	0.145	0.345	138
Total.. . . .	0.45	0.45	1.00	122
<i>Levels undercutting and shooting.. . . .</i>	....	0.305	0.655	115
Loading.. . . .	....	0.145	0.345	138
Total.. . . .	0.45	0.45	1.00	122

NOTE.—The above narrow work rates of 1921 are applicable to single shifted places. Three cents per ton extra is paid for double shifted single places.

The committee adjourned until two o'clock.

The committee resumed at 2.05 p.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Perhaps we can resume. The committee will come to order. Before Mr. McLachlan takes the stand again, there are certain tables referred to by Mr. Baxter this morning, and I do not understand, nor do the clerk nor the reporter, whether they are to go into the record or not. These papers all relate, I think, to wages. Is it the desire of the committee that they should be inserted in the record, or were the explanations given by Mr. Baxter specific enough?

Mr. COWAN: The question is not whether it will be satisfactory to me, but the public and the press want to have these for comparison and for use, and the explanation which Mr. Baxter gave us this morning will hardly convey the full expression to them, would it?

Mr. CHISHOLM: I think they are important.

Mr. COWAN: I think they ought to go in. It does not mean an awful lot of extra expense, and we will always have them for use.

The CHAIRMAN: Is that the desire of the committee?

Mr. MCKENZIE: I think they had better go in.

The CHAIRMAN: Here is another booklet, which in looking over seems to be a comparison. It is a day-wage agreement supplemental to 1920 to 1922 contracts for districts 14, 21 and 25 between Southwestern Interstate Coal Operators' Association and the United Mine Workers of America for Missouri, Kansas, Arkansas and Oklahoma. It is signed September 2nd, 1920, effective August 16th, 1920, and expires March 31st, 1922.

[Mr. J. B. McLachlan.]

Mr. BAXTER: That will be just the rates paid in that district.

Mr. COWAN: We do not want to encumber the record with a lot of unnecessary stuff, but if there is anything important in that, I think it ought to go in.

The CHAIRMAN: I was not here this morning, and did not hear the evidence—

Mr. CHISHOLM: I think it is very important for comparative purposes.

The CHAIRMAN: Reference was made in the evidence to this?

Mr. CHISHOLM: Yes.

The CHAIRMAN: Is it your desire that this be inserted also?

Mr. MCKENZIE: I think we had better put this all in.

The CHAIRMAN: If that is your desire, it is so ordered.

DAY WAGE AGREEMENT

Supplemental to 1920 to 1922 Contracts for Districts 14, 21 and 25 between Southwestern Interstate Coal Operators' Association and United Mine Workers of America for Missouri, Kansas, Arkansas and Oklahoma.

Signed September 2, 1920. Effective August 16, 1920. Expiring March 31, 1922.

Kansas City, Mo., September 2, 1920.

To the Members of the Southwestern Interstate Coal Operators' Association.

Gentlemen:

This pamphlet contains the joint agreement made by the Joint Conference of Districts 14, 21 and 25, held at Kansas City, Mo., commencing August 30th and ending September 2nd, 1920, also the revised day wage scale in conformity with agreement for each district. Please paste this leaflet in the back of the contract, and use in connection therewith.

W. L. A. JOHNSON,
General Commissioner.

AMENDED REPORT OF SUB-COMMITTEE AS ADOPTED BY CONFERENCE

Kansas City, Mo., September 2, 1920.

Your sub-committee desires to report that they have been able to agree upon a report covering the advances in accordance with the statement hereto attached, and recommend its adoption.

We further agree that Section 6, Interstate Agreement, shall be referred to International President Lewis and President Clemens of the Southwestern Interstate Coal Operators' Association for such consideration as to charges therein or its application, as they may mutually agree upon. Said section, however, to remain in full effect until such changes are mutually agreed upon.

H. N. TAYLOR,

For the Operators.

D. A. FRAMPTON,

For the Miners.

Sub-Committee.

REPORT OF SUB-COMMITTEE AS ADOPTED BY CONFERENCE

Kansas City, Mo., September 2, 1920.

On August 10, 1920, President Wilson requested the joint scale committees of the miners and operators of the Central Competitive Field to meet in the city of Cleveland Ohio, on Friday, August 13, 1920, for the purpose of "considering any inequalities

[Mr. J. B. McLachlan.]

that may have occurred in the award of the Bituminous Coal Commission and the joint agreement growing out of the same, and adjusting any and all such inequalities that the joint scale committee may mutually agree should be adjusted."

Acting under the above authority and the further interpretation of the same by United States Attorney General Palmer, applying said letter to the Outlying Districts, other than the Central Competitive Field, we hereby agree on the following changes as an adjustment of certain inequalities in Districts 14, 21 and 25, growing out of the award of the Bituminous Coal Commission, as hereinafter agreed to.

In consideration therefore of the specific assurances and guarantees of the officials of Districts 14, 21 and 25, U. M. W. of A., that they will exercise their full authority and influence with the miners of each District in protecting the regular operation of all mines in securing the maximum production therefrom, during the life of this contract, which shall expire March 31, 1922, the following contract and wage scale changes have been agreed upon:

1st. That the present contract day wage scale of all day and monthly men be advanced in the sum of one dollar and fifty cents (\$1.50) per day, with the following exceptions:

Trappers present contract wage advanced 82 cents per day.

Spragging, coupling and greasing when done by boys, present contract wage scale advanced 82 cents per day.

Boys employed exclusively as slate pickers shall receive an advance in addition to present contract wage scale of 82 cents per day.

Electric hoist operated by boys (in District 21) advanced present contract wage scale of 82 cents per day.

The wages of shot firers in each district shall be advanced one dollar and fifty cents (\$1.50) per day, and where the amount paid for extra places is specifically named in the contract, shall be advanced in Kansas to twenty cents (20c) per place and in Missouri to sixteen cents (16c) per man. The customs for paying extra in District 21 shall be continued and advanced proportionate to the day wage advance.

2nd. This agreement shall take effect on August 16, 1920, and expire March 31, 1922.

For Southwestern Interstate Coal Operators' Association:

IRA CLEMENS, Pres.

F. W. LUKINS,

H. N. TAYLOR,

W. L. A. JOHNSON, Gen. Comm.

For United Mine Workers of America:

ALEXANDER HOWAT,

THOMAS HARVEY, District 14.

WM. McLACHLAN,

J. D. WINTERS, District 21,

ARCH HELM,

D. A. FRAMPTON, District 25.

DISTRICT 14—DEEP SHAFT MINES

INSIDE DAY WAGE SCALE DISTRICT 14 (CONTRACT PAGES 57-58).

Track layers..	\$7 50
Track layers' helpers..	7 25
Trappers..	4 00
Bottom cager..	7 50
Drivers..	7 50
(For each additional mule 17½ cents extra.)	
Trip riders..	7 50
Pushers..	7 50
Water haulers and machine haulers..	7 50

[Mr. J. B. McLachlan.]

Timbermen, where such are employed	\$7 50
Spragging, coupling and greasing when done by boys	5 00
Shot firers	8 01
The rate per place advanced to 20 cents per place.	
Digging coal by day	7 79
Airmen	7 50
Shaft sinkers	7 79
Motormen	8 01
Gas men	8 03

Provided further where the scale rate for motormen or gas men was higher than the above scale provided for such work April 1, 1920, the wages for such labour shall be increased \$1.50 per day. When miners furnish own tools as per Article 16, page 85, 15.6 cents additional.

OUTSIDE DAY WAGE SCALE (CONTRACT, PAGE 59)

First class blacksmiths	\$8 01
Second class blacksmiths	7 70
Blacksmith's helpers	7 25
And all outside day labour	6 86
Operators of incline rock dump hoist	6 97
Night fireman	6 86

Carpenters when employed to do general carpenter work shall receive the union scale of wages for this district; this shall not be construed to apply to or affect, in any way, any man regularly employed about the mines who may be required to do general repair work.

Local Union 501, United Brotherhood of Carpenters and Joiners of America Pittsburg, Kansas, has notified the Association officially that, "on and after January 1, 1920, the scale of wages in this district for carpenters will be \$1 per hour for 8 hours."

SCALE FOR ENGINEERS AND OPERATORS OF HOISTS (CONTRACT, PAGES 59-60)

Engineers, first class, 500 tons and over	\$209 16 per month
Second class, 300 tons to 500 tons	202 16 per month
Third class, 300 or less	192 81 per month

The minimum rate for tail rope and slope engineers shall be \$7.50 per day or \$194.78 per month, provided further that the maximum rate for tail rope and slope engineers shall be \$7.65 per day, or \$198.66 per month, 26 days to constitute a month's work, and 9 hours to constitute a day's work. All overtime in excess of 9 hours to be paid for at a proportionate rate per hour.

The above scale of prices to apply regardless of whether the power used be steam electricity or gasoline.

SCALE OF WAGES, GENERAL—STRIP MINES (CONTRACT, PAGES 88-89)

Engineer: Electric, gas or steam, pulling coal from strip mine to tippie, or tippie engineer	\$7 65
Tail rope engineer: Electric, gas or steam, pulling coal out of strip mine	7 50
Coal shovelers	7 50
Drivers	7 50
(17½ cents extra for each additional mule or horse.)	
Coal shooters	7 80
Drillers, or coal shooters' helpers	7 25
Track layers	7 50
Track layers's helpers	7 25
Ditchers in strip mine	7 50
Ground men around excavating machine	7 30
Ground men around coal loading machine	7 50
Trip riders	7 25
Flat trimmers and dumpers at tippie	6 86
Blacksmiths, when doing construction work	8 01
Blacksmiths, when doing repair work	7 70
Stationary fireman	6 86
Pumpers	7 50

[Mr. J. B. McLachlan.]

Sledgers	\$7 50
Couplers and hooks.. . . .	7 15
Water carrier, when done by boy.. . . .	5 05
Greasing, when done by boy.. . . .	5 05
Driller on bank machine, using steam, air, electricity or gas.. . . .	7 50
Cagers on top of tippie.. . . .	7 15
Coalers, putting coal on steam shovel.. . . .	7 50
Cagers in pit.. . . .	7 50
Teamster, when not pulling coal and working outside of pit.. . . .	6 86
Drivers, hauling coal and shovelling into cars.. . . .	7 50
Team and teamster.. . . .	8 55
Team drivers, furnishing team.. . . .	8 98
Drivers, hauling coal, furnishing team and shovelling into car.. . . .	8 98
All other common labour in pit, not mentioned.. . . .	7 50
All other common labour outside of strip mine.. . . .	6 86

Where carpenters, boiler makers, or machinists are employed their rate of wages will not be less than the union scale of wages in this district for those classes of labour.

SCALE OF WAGES, STEAM SHOVEL. (CONTRACT, PAGE 90)

Monthly engineers, firemen, cranemen, oilers, etc., in strip mines are advanced proportionately the same as day men on the basis of 305 working days per year, divided by 12 months as per Article 1 and 2, Section 13, strip mine contract, which excludes Sundays and legal holidays. (See contract pages 90, 91 and 92.)

Scale of wages for steam shovel engineers, firemen and cranemen at strip mines:

Engineers, per month.. . . .	\$277 70
Cranemen, per month.. . . .	219 95
Firemen, per month.. . . .	198 96
Oiler on steam shovel, per month.. . . .	183 20
Scale of wages for night men at steam shovel plant, per month.. . . .	220 87

SCALE OF WAGES, COAL LOADING MACHINES (CONTRACT, PAGE 91)

Scale of wages for engineers and firemen on coal loading machines, exclusive of noon-time, Sundays and legal holidays:

Engineers, per month.. . . .	\$227 70
Firemen, when needed, per month.. . . .	193 70

SCALE OF WAGES, COAL LIFTING MACHINES

Scale of wages for engineers, on derrick, lifting coal out of strip mines shall be \$8.96 per day.

Scale of wages for engineers operating locomotive crane or drag line, hoisting coal out of the strip mines, shall be \$219.95 per month.

DISTRICT 21—DEEP SHAFT MINES AND SLOPES

INSIDE DAY WAGE SCALE DISTRICT 21 (CONTRACT, PAGES 149-150-191-192)

Inside day wage scale for Arkansas, Eastern Oklahoma and Oklahoma.

Timberman.. . . .	\$7.502
Track layers.. . . .	7.502
Track layers' helpers.. . . .	7.251
Trappers.. . . .	4.0025
Bottom cagers.. . . .	7.502
Drivers.. . . .	7.502
Trip riders.. . . .	7.502
Pushers.. . . .	7.502
Water haulers and machine haulers.. . . .	7.502
All other inside day labour.. . . .	7.252
Spragging, coupling and greasing when done by boys.. . . .	4.9975
Shot firers or tampers, under normal conditions.. . . .	8.007
The fire boss shall receive.. . . .	8.049
The fire runner shall receive not less than.. . . .	7.502
(where such are employed.)	

[Mr. J. B. McLachlan.]

For boys operating electric hoists	\$5.281
Electric slope engineers	7.502
Motormen	7.502
Pumpmen	7.502
Head machinists	8.112
Machinists	7.7025
"Boys" means those of maximum age of 19 years.	
Day wages for digging coal	7.7865
Machine runners	8.007
Machine helpers	7.7025
Shaft sinkers	8.049
OUTSIDE DAY WAGE SCALE FOR ARKANSAS, EASTERN OKLAHOMA AND OKLAHOMA	
First blacksmiths	\$8.007
Second blacksmiths	7.7025
Blacksmith's helpers	7.251
Carpenters	7.329
All other outside day labour	6.8625

SCALE FOR ENGINEERS

Steam locomotive engineers on outside work shall receive \$0.9195 per hour (in Arkansas and Eastern Oklahoma only).

Engineers, first class, 500 tons and over per month	\$209.1535
Second class, 300 to 50 tons per month	202.165
Third class, 300 tons or less, per month	192.81 1-20

The minimum rate for tail rope and slope engineers shall be \$7.272 per day or \$189.02 1/5 per month, provided further, that the maximum rate for tail rope and slope engineers shall be \$7.65 per day or \$198.89 17/20 per month.

NOTE: On page 150 of contract the maximum rate for tail rope and slope engineers reads \$169.89 17/20 and should read \$159.89 17/20 and is corrected in the above figures.

DISTRICT 25—DEEP SHAFT MINES AND SLOPES

INSIDE DAY WAGE SCALE DISTRICT 25 (CONTRACT, PAGES 170-171), DEEP SHAFT MINES

Track layers	\$7 50
Track layers' helpers	7 25
Trappers	4 00
Bottom cagers	7 50
Drivers	7 50

When a spike team driver gathers coal at the face he shall receive 20 cents extra per day for each additional mule. When a parting driver takes a spike team into the face to gather coal, he shall receive same as above, but when he returns to his parting driving, his wage shall be \$7.50 per day.

Trip riders	\$7 50
Pushers	7 50
Water haulers and machine haulers	7 50
Timbermen, where such are employed	7 50
Pipemen for compressed air plants	7 42
Brushing top or bottom	7 50
Handling rock or dirt at face	7 50
Spragging, coupling and greasing when done by boys	5 00
Shot firers under normal conditions	8 01
Machine runners	7 71
Rail setters	7 50
Spraggers of coal	7 50
Machine shovelers	7 50
Track men with machine	7 25
Mine examiners or gas men	8 01
Sinkers (minimum)	7.78
All other inside day labourers	7.25

[Mr. J. B. McLachlan.]

OUTSIDE DAY WAGE SCALE

Dynamo tender and night hoister (9 hr. shift)	\$ 01
Machinist	7 79
First blacksmiths	8 01
Second blacksmiths	7 70
Blacksmith's helpers	7 25
Carpenters	7 25
Firemen when desired by the management and where employed are to do such other work as desired	6 86
All other outside day labour	6 86
Dirt picking when done by boys shall be \$4.53 per day.	

HOISTING ENGINEERS—STEAM OR ELECTRIC

First class, 500 tons or over per day, per month	\$209 16
Second class, 300 tons to 500 tons per day, per month	202 15
Third class, 300 tons or less per day, per month	192 82

TAIL ROPE AND SLOPE ENGINEERS

Minimum rate \$7.27 per day, or per month	\$189 00
Maximum rate \$7.65 per day, or per month	198 90

DIRT DUMP ENGINEERS

Engineers on incline rail dirt dumps with gravity return	\$ 6 97
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DOMINION COAL COMPANY, LIMITED

Miscellaneous Rates

Schedule of rates effective January 1, 1920

Classification	Old Rate	New Rate
Teamsters	\$3.40	\$3 95
Labourers	3 25	3 80
Harness shop—		
Foreman	4 90	5 45
Harness makers	4 60	5 15
<i>Apprentices</i> .—To start at \$1.50 and be increased 50 cents per day each six months until minimum rate of craft is attained.		
<i>Veterinary Hospital</i> .—		
Blacksmiths	4 00	4 55
Jack-leg veterinary	90 00	103 75 per mo.
<i>Sterling Yard</i> .—		
Foreman	3 60	4 15
Labourers	3 25	3 80
<i>Maintenance-of-way</i> .—		
Section foreman	115 00	128 75 per mo.
Section men	or 0 52 per hr. 0 45 "	

If the section men on the Canadian National Railways get an advance of \$1 per day over their present rate (\$3.20) the company will advance the section men to 47½ cents per hour and the foreman to 55 cents per hour retroactive to date of this agreement. No advance will be given the monthly foremen on this account.

Overtime for monthly men to be paid at the rate of 52 cents per hour.

Hours of work to be from 7 a.m. to 12 (noon) and from 1 to 4 p.m. (Railway time).

Classification	Old Rate	New Rate
Freight handlers	\$0 44 per hr.	....
Bunker pocket men	3 25 per day	\$3 80
		of 8 hrs.
<i>Railway Construction</i> .—		
Carpenters, 1st class	4 15	4 70
Carpenters, 2nd class	3 90	4 45
Labourers	3 25	3 80
Construction foremen	4 00	4 55

NOTE.—Boys follow colliery surface arrangement.

Banking Station.—

Box car enginemen	4 00	4 55
Steam shovel engineer	6 50	7 05
Steam shovel cranimen	4 50	5 05
Steam shovel firemen	3 30	3 85
Box car trimmers	3 35	3 90
Labourers	3 25	3 80

NOTE.—Boys follow colliery surface arrangement.

[Mr. J. B. McLachlan.]

DOMINION COAL COMPANY, LIMITED

Property Department

Schedule of rates effective January 1, 1920

Classification	Old Rate	New Rate
Carpenters, 1st class..	\$4 15	\$4 70
Carpenters, 2nd class..	3 90	4 45
Painters, foreman..	4 50	5 05
Painters, ordinary..	4 25	4 80
Plumbers..	5 00	5 55
Plumbers, assistants..	3 90	4 45
Teamsters, single..	3 40	3 95
Teamsters, double..	3 50	4 05
Plasterers..	6 00	6 55
Plasterers..	5 00	5 55
Masons and bricklayers..	6 00	6 55
Masons and bricklayers..	5 60	6 15
Pipemen..	4 25	4 80
Labourers..	3 25	3 80

NOTE.—When boys are employed they shall be paid \$2.40 per day under 17 years, and \$2.75 between 17 and 18 years.

Hours of labour to remain as at present.

S. & L. RAILWAY

	Old Rate	New Rate
Section foremen..	\$115 00 per month	
52 cents per hour to be increased to 55 cents per hour if \$1.00 adjustment is given to C.N.R. retroactive to date of settlement with D.C. Co.		
Section men—		
45 cents per hour to be increased to 47.5 cents per hour if \$1.00 adjustment is given to C.N.R. retroactive to date of settlement with D.C. Co.		

Hours of labour 7 a.m.—12 noon and 1 p.m.—4 p.m. Overtime for monthly section foreman to be paid at rate of 52 cents per hour.

	Old Rate	New Rate
Bunker pocket tender, Dominion No. 1..	\$ 3 25	\$ 3 80
Flagman, Glace Bay..	82 50	128 75
Pumpmen, S. & L. Water Tanks..	72 40	86 15
Construction foreman..	4 00	4 55
Carpenters..	\$4 15 and 3 90	4 45 and 4 70
Freight handlers, S. & L..	0 44 per hour	
Ordinary labour..	3 25	3 80

Railway employees to work in railroad time.

Construction

	Old Rate	New Rate
Carpenters, \$3.70 and over..	\$4 15	\$4 70
Carpenters under \$3.70..	3 90	4 45
Machinists, \$4.25 and over..	4 70	5 25
Machinists under \$4.25..	4 10	4 65
Boys..	2 75	3 30
Bricklayers..	{ 6 00	{ 6 55 }
	{ 5 60	{ 6 15 }
	5 00	5 55
Electricians, \$4.44 and over..	4 50	5 05
Electricians under \$4.44..	4 50	5 05
Linemen..	3 80	4 35
Linemen, helper..	4 25	4 80
Water linemen, New Waterford..	3 70	4 25
Water linemen, Glace Bay..	4 70	5 25
Stablemen..	110 00	123 75 per mo.
Teamsters, double team..	3 50	4 05
Teams'ers, single team..	3 40	3 95
Blacksmith..	4 30	4 85
Pumpmen, booster pump, Glace Bay..	3 80	4 35
Pumpmen, No. 8 water shaft..	4 00	4 55
Wash plant and mechanic, Sydney..	4 70	5 25
Wash engineers, No. 2 power plant..	140 00	153 75 per mo
Wash engineers, Carney's lake..	130 00	143 75 " "
Comp. and elec. oilers, men..	3 85	4 40

[Mr. J. B. McLachlan.]

Classification	Old Rate	New Rate
Comp. and elec. oilers, boys	\$2 85	\$3 40
Head firemen, No. 2 power plant	4 50	5 05
Head firemen, Carney's lake	4 20	4 75
Ashwheelers	3 50	4 05
Stokers	3 80	4 35
Conveyermen	3 00	3 55
Ordinary labour	3 25	3 80
Underground—		
Examiners and shot firers (by night)	\$4 50	\$5 05
Examiners and shot firers (by day)	4 25	4 80
Boss drivers	4 00	4 55
Drivers' rooms	3 60	4 15
Drivers' levels	3 40	3 95
Pit stablemen	3 60	4 15
Haulage enginemen (main deeps and man haulage)	3 80	4 35
Haulage enginemen, levels	3 55	4 10
Haulage enginemen, headways and small donkeys	3 35	3 90
Trip riders—Main deep and main and tail rope		
haulage	3 80	4 35
Trip riders, others	3 55	4 10
Air locomotive drivers	4 00	4 55
Air locomotive brakemen	3 70	4 25
Spraggers	3 40	3 95
Rollermen	3 80	4 35
Couplers	3 40	3 95
Pit tub oilers	3 40	3 95
Landing tenders (datal)	3 70	4 25
Onsetters (hoisting cages) headmen	4 00	4 55
Onsetters helpers	3 70	4 25
Jig and balance onsetters	3 50	4 05
Brakeholders	3 30	3 85
Cage runners	3 80	4 35
Man cage onsetters (Nos. 2 and 9)	4 05	4 60
Man cage onsetters, others	3 75	4 30
Rope examiners and splicers	4 25	4 80
Bratticemen	3 60	4 15
Trappers, men	3 35	3 90
Trappers, boys	2 20	2 75
Roadmakers (main track and turnouts)	4 25	4 80
Roadmakers, others	4 00	4 55
Timbermen	3 75	4 30
Pumpmen (capable of doing ordinary repairs) . .	4 00	4 55
Shaftmen	5 00	5 55
Material men	3 40	3 95
General labourers	3 35	3 90
Assistant examiners	3 35	3 90
Assistant shotlighters	3 60	4 15
Machine repairs	4 00	4 55
Pick men, No. 2	4 25	4 80
Pickmen, others	3 70	4 25
Pick men, boys	3 00	3 55
Pipemen	4 10	4 65
Miners (taken from face to do other work) . . .	4 50	5 05

Note.—At each colliery a rate of \$4.50 per day for special work such as permanent timbering on the slope by night may be paid by the manager.

Where boys are employed underground they shall receive \$2.75 per day up to 17 years and \$3 between 17 and 18 years, except trappers, who shall be paid \$2.20. This applies to boys being taken on.

Hours of labour to remain as at present.

Miners out of places to take classification rate.

When men are taken from their ordinary occupation to do other work they shall receive the higher of the two classification rates.

DOMINION COAL COMPANY, LTD.

Cape Breton Collieries

Schedule of Datal Rates, Effective January 1.

Classification	Old Rate	New Rate
Surface—		
Headmen (attending man cage, or coal hoisting cage where men are lowered, and dumping cage-man)	\$3 75	\$4 30
Tally boys (boys taking tallies out of empty boxes)	2 40	2 95
[Mr. J. B. McLachlan.]		

Classification	Old Rate	New Rate
Tipple men, unhookers and grabmen at head of slopes.....	\$ 3 50	\$ 4 05
Bank and screenmen (including men reading off tallies at weigh scale).....	3 30	3 85
Carshunters and trimmers (including box car trimmers).....	3 35	3 90
Pit tub oilers.....	3 30	3 85
Pick men.....	3 30	3 85
Hoisting enginemen (including shafts and main trip haulages).....	4 60	5 15
Man engmen-shafts.....	4 60	5 15
Man engmen-slopes.....	4 30	4 85
Main endless haulage.....	3 95	4 50
Fan enginemen (steam engine), Nos. 2 and 9.....	4 00	4 55
Fan enginemen, other large engines.....	3 80	4 35
Fan enginemen, small engines and motor fans.....	3 55	4 10
Screen and bank mechanic (No. 2).....	4 00	4 55
Others.....	3 80	4 35
Box car enginemen.....	3 75	4 30
Brook and reservoir pumpmen.....	3 80	4 35
Compressor men (with oilers).....	3 85	4 40
Compressor men (doing own oiling).....	4 50	5 05
Compressor oilers.....	2 85	3 40
Head stokers.....	4 00	4 55
Stokers.....	3 80	4 35
Ash wheelers and coal to fires.....	3 40	3 95
Conveyor men.....	3 70	4 25
Machinists (1st grade).....	4 60	5 15
Machinists (2nd grade).....	4 00	4 55
Apprentices (boys).....	2 80	3 35
Electricians.....	4 05	4 60
Smiths (1st grade).....	4 30	4 85
Smiths (2nd grade).....	4 00	4 55
Smiths' helpers.....	3 40	3 95
Carpenters, 1st class.....	4 05	4 60
Tubmen and 2nd class carpenters.....	3 80	4 35
Masons.....	5 60	6 15
Masons' helpers.....	3 25	3 80
Teamsters (double team).....	3 50	4 05
Teamsters (single team).....	3 40	3 95
Stablemen.....	110 00	123 75
Washhouse and boilers tenders.....	3 50	4 05
Washhouse tender only.....	3 25	3 80
Lamp room men (monthly) No. 2.....	120 00	133 75
Lamp room men (others).....	100 00	113 75
Lamp room men (daily).....	3 80	4 35
Lamp room men, boys.....	2 80	3 35
Labourers.....	3 25	3 80

THE CHAIRMAN: Dr. Cowan, will you take the Chair? I have some work to do, and would like to be relieved, as I want to go home to-night.

Mr. COWAN: Very well, Mr. Chairman.

Mr. MCKENZIE: Is it understood we are to close at three o'clock?

Mr. COWAN: We have to. We have no authority to sit while the House is sitting.

Mr. COWAN assumed the Chair.

J. B. McLACHLAN, recalled.

By the Acting Chairman:

Q. Mr. McLachlan, will you just commence where you left off this morning?—

A. I think Mr. Baxter said that it would be a fair statement to make that the wage rate on the average had gone up about one hundred and ten per cent. On account of the large number of different rates, it is rather difficult to determine, but I believe that would be a fair statement that the wage rates on the average for the mines in Nova Scotia have gone up, since 1913 or 1916—the rates were the same on both these dates—one hundred and ten per cent. These increases of which I spoke—in reading this over the committee will notice that a great deal is said about the increased cost

Mr. J. B. McLachlan.]

of living, and one is apt to jump to the conclusion that the increase is brought about in wages, because the cost of living had gone up. Now, that would not be the whole truth. It is not a fair statement to say that the wages went up because the cost of living had gone up. It is true that that matter has been referred to, and it looks like that, but the margin which existed between the miners' earnings and their expenses for his home was so narrow that the least little move might drop that man into a condition that might be described as distressful. I want to compare the increases with the increased cost of living as given by the Department of Labour, in a statement which they published monthly for a family of five. They have been doing this thing since, I think, about 1909, and there was a Special Committee at one time, to inquire into the increased cost of living, and that Special Committee went back a little farther than that. They went back to the year 1900, and taking these two authorities, the *Labour Gazette*, and that Special Committee, we find that the cost of living for foodstuffs for a family of five in the year 1900, was \$5.48; in 1905 it cost \$5.95; and in 1909, or approximately when the Shortt Board made its award, the cost of living was \$6.75. In 1914, it was \$7.42; in September, 1920, it was \$16.84, and last month, or the last issue of the *Gazette*, the figures stood, for the month of March at \$13.23, showing a reduction from last year. The increased cost of living for the miners in Nova Scotia from the year 1909 to September, 1920, was one hundred and forty-nine per cent, and their wage increases for the coal miners—contract miners—was approximately one hundred and ten per cent, so that we are away behind in the increased cost of living; in other words the men were gradually falling behind in the raise. Now, it may be said that as the cost of living came down—and I think Mr. Wolvin made some statement to that effect—that if the cost of living came down, naturally the wages should come down. Now, there is not the same argument when the cost of living comes down for making a change in the wages. It is absolutely different. On the one hand, taking what the *Labour Gazette* says about the food that should be supplied to a family of five, they talk about meat and veal and other things, but I want to take one item—that of milk. They allow six quarts of milk for a family of five. Now presumably the people who drafted that said "Here is a standard of living which the worker should have; six quarts of milk a week." If we put that at seven, it means this, that the baby gets four-fifths of a pint of milk a day. That is what they said. That is the allotment for a working man's family. If the cost of living goes up just a few points, it means these people are in distress. If, on the other hand, the cost of living goes down a few points, it may mean that the baby will get a full glass of milk instead of four-fifths, and I want to say that Mr. Wolvin or any other man who lives as he lives, who comes to the miner, and says that because the baby is getting a full glass of milk instead of four-fifths, the cost of wages should come down, he cannot be a wise man to do it, and it is not a wise man who says that the cost of living is coming down, and therefore, your wages should come down. In this connection I want to say a few words about the price of bunker coal. In the year 1909, the Dominion Coal Company was selling bunker coal in Halifax at three dollars and seventy-five cents. In September, 1919, they were selling it at ten dollars and a half. In starting out, I said this about the United States coal situation, that in the spring of 1920 there was a strike on when a commission was appointed by the President, and at that time, in September, the Dominion Coal Company was getting ten dollars and a half for coal, which along the Atlantic sea-board, right through from Boston, Philadelphia, Newport News and Baltimore, had stood at six dollars and a half. In Halifax, it was ten dollars fifty, and in these American ports it was six dollars and a half, and after they got a settlement through the President's Commission in the month of May, the price of coal went up from four dollars to, in some cases, fourteen or fifteen dollars a ton; in other words, the operators made a raid on the public and collected the money simply because there was the belief that coal was scarce.

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By the Acting Chairman:

Q. Tell me, just at that point: Does the Dominion Coal Company meet a keener competition for their bunker coal than they do for their other coal?—A. I do not think so.

Q. I was trying to get the reason why this was dropped the other day, whether it was due to unusual competition or not.—A. There may be a stronger competition at the present time. I want to say about this ten dollar and a half coal in September that if the operators in the United States put their coal up from six dollars and a half to fourteen or fifteen dollars, it is quite reasonable to suppose they would put it up over ten dollars and a half.

By Mr. Douglas:

Q. Their price at that time—the Dominion Coal Company's price at that time, Mr. McLachlan, I understand was fourteen dollars and a quarter—their bunker price?—A. That was the price.

Q. We have evidence of that, I think?—A. Yes. The point I want to make is this: that this bunker coal price went up a little more than the cost of living for the miners, and while the wage rate went up one hundred and ten per cent, and the cost of living one hundred and forty-nine per cent, and we will be safe in saying, in September, 1920, the price of bunker coal went up two hundred per cent. Speaking now of the efficiency of coal mines—

By the Acting Chairman:

Q. I would like you to enlarge upon that, because that is to me a very important point, and I would like you to enlarge upon that if you can, and tell us something about the effect of the eight-hour day, as to whether it has lessened production per man, and has consequently increased the overhead charges. I would like to know that?—A. The lessening of production, if any, would be so slight as to be hardly noticeable. When we speak about the efficiency in the coal mines, that is from the miner's standpoint, we talk about it from our own view, as to the efficiency of a mine. The efficiency of a mine does not necessarily mean the getting up of coal. We want to see the mines in such an efficient condition that the men's lives will be safeguarded first. Now, all of Canada is occupying a very bad and notorious position in this world at the present time in regard to accidents in the coal mine. I have a little statement here I want to put in. It is taken from a little pamphlet issued by the Department of the Interior, Bureau of Mines, Washington, D.C. It gives the number of accidents in the United States in the coal mines. I will give this to you when I am through with it.

Starting with the United States for each thousand men employed per annum, the number of fatal accidents is 3.76. Out of each thousand men who enter the mines each year, three and three-quarter of them are going to be killed in the United States. The average in Britain is 1.3. In other words a man has a three times better chance of losing his life in the United States than he has in the coal mines of Britain. That shows that the British coal mines are being run efficiently. They may not get as much coal out as they do in the United States where they have men of every nationality working in the mines, men whose names even they do not know, and they do not know whether they are there or not, and men whom they can get to work under any of these conditions.

DEPARTMENT OF THE INTERIOR, BUREAU OF MINES,
WASHINGTON, D.C.

The following table gives the fatal accidents annually per 1,000 men employed in the coal mines of the countries named:—

Year	Country	Total Accidents	Country	Total Accidents	Country	Total Accidents
1911.....	U. S.....	3.65	G. Britain..	1.19	N. S. Wales	0.86
1912.....	U. S.....	3.35	" ..	1.17	" ..	1.00
1913.....	U. S.....	3.73	" ..	1.55	" ..	0.96
1914.....	U. S.....	3.22	" ..	1.08	" ..	0.86
1915.....	U. S.....	3.09	" ..	1.36	" ..	1.28
1916.....	U. S.....	3.09	" ..	1.32	" ..	0.78
1917.....	U. S.....	3.56	" ..	1.34	" ..	1.40
1918.....	U. S.....	3.88	" ..	1.30	" ..	0.66
Average.....		3.76	" ..	1.30	" ..	1.06
1911.....	British C...	2.33	Nova Scotia	2.87	India.....	1.39
1912.....	" ..	3.93	" ..	2.63	" ..	1.29
1913.....	" ..	4.05	" ..	3.51	" ..	1.39
1914.....	" ..	2.97	" ..	2.53	" ..	1.05
1915.....	" ..	10.42	" ..	2.51	" ..	1.14
1916.....	" ..	5.53	" ..	2.13	" ..	1.18
1917.....	" ..	8.51	" ..	6.97	" ..	1.06
1918.....			" ..	6.86		
Average.....		5.39		3.75		1.21
1911.....	France.....	1.08	Prussia.....	2.00	Belgium....	1.15
1912.....	" ..	1.49	" ..	2.54	" ..	1.00
1913.....	" ..	1.07	" ..	2.48	" ..	1.05
1914.....			" ..	2.40		
Average.....		1.21		2.35		1.06

And in New South Wales the average rate per 1,000 men employed per annum is 1.06, and in India, where you would expect they would sacrifice men in a most brutal way to get cheap work, the number of fatal accidents per thousand men employed is 1.21; in Belgium it is 1.06; in Russia it is 2.35, and in France it is 1.21. In Nova Scotia it is 3.75. We have three times more men than any coal mining country I have mentioned. We are killing three times more men than they do in India.

By Mr. Douglas:

Q. What year is that?—A. That is an average over a period in Great Britain, United States, and Nova Scotia. I have the figures here from British Columbia from 1911 to 1918. They stand highest in this respect, the average being 5.39.

By the Acting Chairman:

Q. Do you claim it is due to the bad laws we have in the inspection of the mines, or what is it?—A. I am talking about Nova Scotia—that the law is not enforced.

Q. By whom should it be enforced?—A. By the Nova Scotia Government.

Q. And it is not enforced?—A. No.

Q. It is a provincial law?—A. Yes.

By Mr. Douglas:

Q. You do not complain about the laws themselves so much as you complain about the non-enforcement of them?—A. The non-enforcement of them. I do not believe there was ever an operator, nor an official of the operators, convicted of any offence in Nova Scotia, but I have known men in mines to be idle because they could not get air in the mine. The men could not get air. They could take air in if they wanted to, but it was not there. I want to relate about one mine, mine No. 24, and this only one case, a new mine, a few hundred feet from the surface.

[Mr. J. B. McLachlan.]

Q. That is the mine called the Victoria mine?—A. Yes.

Q. Just started when the war was over?—A. Yes, the Victoria mine. There was never any gas discovered, any explosive gas; it was simply for the want of oxygen for the men to live in, that they complained, and they were coming out with their legs doubled up and they were walking like drunken men. They were vomiting, and the men complained about it. The mine was probably closed up for a week, not because this dull time was on, but as a sort of penalty because the men complained.

Q. One of the witnesses, probably Mr. Wolvin, spoke of the cost of inspection which the company had to pay for. Are the inspectors paid by the Government or the company?—A. The company has safety first men. That is one of the classes of men they had during recent years, probably since the war started, probably after it commenced.

Q. Make it clear to the Chairman; generally inspection is paid for by the Government?—A. Yes. By the Government. The Government has inspectors.

By the Acting Chairman:

Q. Have they a sufficient number of them?—A. Yes, they have.

Q. I should judge from what you say that the inspectors are there drawing their salaries and not doing their work?—Is that the idea?—A. I think the inspectors go as far as they dare go.

Q. Who prevents them from going further?—A. I do not know. They do not go. I do not know who prevents them. They do not do it. I was going to say in regard to inspectors, that is one item of increased cost that has been added to the mines in Nova Scotia. It is these inspectors.

By Mr. Douglas:

Q. How about the policemen?—A. These are another class, and I am going to deal with them in a minute. They have been added and been enabled to reduce the ratio. I was talking about 24 mine. I am coming to that in a minute. The mine was closed out. I want to show how these things are done. If that had been in Britain that man would have been arrested and tried for failing to have sufficient ventilation passed to these workmen, and convicted. There was nothing done about it. We complained to everybody about it and nothing was done. All that was done cost the men a week's work. One man that was active in making that protest lost probably another week's work. The law compels you before you under-cut the coal to put a sprag up to the face of the coal. This particular man had a sprag in, but the manager said it was not in the right place, and he came in and took it out and said "You go away, and before you come back have a line from the magistrate that you have appeared before him, and been tried." The man was a good miner and his sprag was on the property. He walked up to the magistrate, and told the magistrate his story, and the magistrate says, "You are fined \$5." This man comes before the magistrate, accuses himself, gives evidence against himself, nobody else is there, he pays \$5 over to this magistrate, who gives him a line to get back his job.

By the Acting Chairman:

Q. Do you say Nova Scotia is in Canada?—A. I want to say I can bring the man here. We appealed to the Attorney General about the collection of that fine. It is a common practice there to send a man to accuse himself, and give evidence against himself, pay a fine, get a line from the magistrate, and get back his job.

By Mr. Maharg:

Q. The object would be to show that he was in wrong, that he was guilty?—A. Yes.

Q. Whether he was guilty or not?—A. The man said he was not, "but I need the job and I am going to pay the \$5, that is all."

[Mr. J. B. McLachlan.]

By Mr. Douglas:

Q. He had to do it to get his job back?—A. Yes.

By Mr. Maharg:

Q. He had to admit he was guilty and he was absolutely sure he was not guilty?—A. Yes. I told the same story in the presence of the Attorney General of Nova Scotia, two or three weeks ago, in Halifax, when there was a committee such as this inquiring into Amendments into the Coal Mines Regulation Act, and there has been nothing done about it yet.

The ACTING CHAIRMAN: It is a strange story to me, and I cannot believe such a thing would happen.

WITNESS: You want to live in Cape Breton a little while.

By Mr. Maharg:

Q. Do I understand that it was the manager of the mine who sent this man to the magistrate?—A. Yes, he sent this man out. He said this sprag is not proper. The law provided you must have a sprag, and the manager said "this is not a proper sprag, you go up to the magistrate, and when you get a line from him that you have been tried I will give you your lamp back." He walked up the street and into the magistrate's office, and he told him, he said "your lamp was not in right," and as says, "I will fine you \$5" and he gave him a receipt.

Q. Is that the first offence in that man's case?—A. I could not say whether it was the first offence or not, but I want to say that that is common practice, and we went after the Attorney General for the purpose of trying to get something done about it when that took place.

Q. Should that not be the inspector's job?—A. I should say it would be the inspector's job to lay the information. Either that or the manager himself should go up and appear against him.

Mr. DOUGLAS: Certainly some one should lay the information.

The ACTING CHAIRMAN: No man should lay an information against himself—that is dead sure.

By Mr. Maharg:

Q. The inspectors are there for the protection of the miners; consequently the manager's proper course would have been to have gone to the inspector, and got the inspector to lay the information if he considered the man was at fault?—A. That would have been the proper course.

Q. It is the inspector's job; that is what he is there for?—A. Yes, to enforce the Coal Mines Regulation Act.

By Mr. Chisholm:

Q. Would it not be a splendid thing to expose cases of that kind in the courts?—A. I think it would.

Q. Would it not be a good thing for the labour union to expose anything of that kind?

Mr. MAHARG: I understand he did complain and nothing was done.

Mr. DOUGLAS: It is only two or three weeks ago, and the Attorney General would be busy, I suppose, with the session. Perhaps that will be attended to.

Mr. CHISHOLM: I should say this man should get the full application of the law. If labour unions would take up these things, the law is there. They have the machinery. It seems to me that labour should make an exhibition of one of these cases, and that is after all the drastic way and the most effective way of remedying these things.

[Mr. J. B. McLachlan.]

The ACTING CHAIRMAN: I think the labour men, if this is true, are perhaps putting themselves in a position where they are inviting this to continue.

Mr. CHISHOLM: Mr. McLachlan has made a very fair statement. The man wanted his job, and he was very poor.

Mr. DOUGLAS: They went to the Attorney General, which shows, as far as the labour organization is concerned, that they want this kind of thing stopped.

Mr. MAHARG: They are working under provincial laws.

Mr. CHISHOLM: It seems to me there must be a deficiency in the inspectorship.

Mr. DOUGLAS: It may be the duty of the manager in that case instead of the inspector.

Mr. CHISHOLM: Supposing Mr. McLachlan as a miner went to the inspector and unfolded the story to him, would it not be the duty of the inspector to take action?

WITNESS: As to the condition of the mine?

Mr. CHISHOLM: Yes.

WITNESS: Oh, yes.

The ACTING CHAIRMAN: It is the duty of the inspector to investigate the whole circumstances in a case of that kind. If that is not the duty of the inspector, what is he there for? What is he doing?

Mr. CHISHOLM: That is my contention.

Mr. MAHARG: I raised the point in the first place as to whose duty it was.

Mr. CHISHOLM: It is the duty of the inspector to see that the mine is kept in an efficient condition as defined by law, and if he fails, we will have a case like that cited by Mr. McLachlan.

Mr. DOUGLAS: It is also the duty of the mine manager to so carry on operations that the safety of life is preserved as much as possible, and if this mine violated the Act, I think the mine manager's duty would be to lay the information himself. Either one of these persons, the inspector or the mine manager, is certainly the man to be compelled to go to the magistrate.

By Mr. Maharg:

Q. Who would be liable to injury if this prop was not in its right place?—A. The man himself.

Q. Nobody else?—A. No.

The ACTING CHAIRMAN: If they have a Workman's Compensation Act, as I presume they have, and any accident happens, the company would have to pay a large amount of money; consequently, the company is financially interested in the lives of every man there. I assume that they have a Workman's Compensation Act there?

WITNESS: Yes.

Mr. CHISHOLM: If this condition prevails, and I have not the slightest doubt at all that Mr. McLachlan is speaking the truth, there must be something radically wrong, and the contention you put forth has not been attended to.

Mr. DOUGLAS: When men have to appear before a magistrate and admit that they have committed a breach of the Mines Act, is is a pretty bad state of affairs.

The ACTING CHAIRMAN: Yes, and invite the courts to fight it out.

By Mr. Maharg:

Q. You do not know to whom the fines go? Is it to the provincial treasury?—A. I do not know.

Mr. DOUGLAS: They usually go to the magistrates and stay there, in Nova Scotia.

Mr. MAHARG: They may furnish a clue to the whole situation.

[Mr. J. B. McLachlan.]

WITNESS: I want to say a little more about this ventilation. There is nothing that will pull down a man's efficiency in the mine, unless an accident when he gets a leg broken, like a lack of a sufficient quantity of fresh air.

By Mr. Chisholm:

Q. Oxygen?—A. Oxygen. I have worked myself in a place in No. 1 mine of the Nova Scotia Coal Company, and if three men walked into that place and started to breathe in it with three lamps, one or two of the lamps would go out for the lack of oxygen. A man cannot dig coal in a place like that.

By the Acting Chairman:

Q. These mines can be easily ventilated? It is not more difficult than usual?—A. The old mine is sometimes hard to ventilate.

By Mr. Chisholm:

Q. But that is the law, that they must be ventilated.—A. That is the law, that it should be ventilated. It is hard, but it can be done.

By Mr. Maharg:

Q. In that particular case, it was a comparatively new mine?—A. It was an ideal mine for ventilating. They will never have a better opportunity to ventilate that mine than they had at that particular time. The men were coming out vomiting and trembling, not because they were working hard, but because there was not good air.

By Mr. Douglas:

Q. When the air is bad in the mine, what does your organization do? Do they take it up with the manager, or do they deal with the Inspector of Mines?—A. We generally take it up with the company.

Q. First?—A. First.

Q. And if you do not get any satisfaction?—A. We go to the Inspector of Mines then.

By Mr. Chisholm:

Q. Would it not be better to go to the Inspector first?—A. Well, I suppose we have not a great deal of faith in the inspector; that is the trouble.

Q. And you have not very much in the management?—A. And we have not a great deal in the management.

Q. You are between the devil and the deep sea?—A. What I wanted to add in connection with this ventilation was: The law reads something like this, that a sufficient quantity of pure air shall pass through the working place to render harmless all noxious gases. There is an idea that when there is no explosive gas there it is not necessary to put in pure air, when there is no danger of an explosion. Now, in No. 24 there was no explosive gas; therefore they concluded it was not necessary to put in pure air.

By the Acting Chairman:

Q. Is there explosive gas in any of the Nova Scotia mines?—A. Oh yes, when we get to a certain depth we are liable to get it. In the older mines we have always been getting it. I want to say that this has pushed up the death rate both in Nova Scotia and in every country, as a matter of fact, this lack of proper ventilation.

By Mr. Chisholm:

Q. Have you any statistics for the west?—A. In Alberta they have very gassy mines. This is the list of fatal accidents. (Hands list to acting chairman).

MR. CHISHOLM: Mr. Chairman, it has just occurred to me that perhaps similar conditions may obtain in your part of the country, in your province, Alberta. You have not sent for any labour representatives from there.

[Mr. J. B. McLachlan.]

The ACTING CHAIRMAN: We did not send for any labour representatives from Nova Scotia. They volunteered to appear.

Mr. CHISHOLM: Who did?

The CHAIRMAN: These gentlemen. They requested a hearing. I have never heard of any complaint from out there as to the inspection of the mines. I do not think there would be any. I am not speaking politically—the Government in Alberta is of a different political faith from mine, but I think the Alberta Government is right on to their work in connection with those mines. I have not heard any complaint of that kind. While the mines are very gassy, from the evidence we heard the other day, the inspection in Alberta is all right.

Mr. CHISHOLM: How are the inspectors appointed?

The CHAIRMAN: By the Government. Have you anything to add, Mr. McLachlan?

WITNESS: I want to say a little about the housing condition. In all the coal mining towns in Nova Scotia, with the exception of Cumberland county, the housing condition is bad. In New Aberdeen the houses are built in double rows, probably fifteen or twenty houses to a row. There is no sewage system, and those dry closets and the ash heaps are in between those rows. That is, if there are fifty houses, there are thirty dry closets there, and it is very hard to keep these clean in the winter-time, and they are not kept very clean at any time. As a matter of fact they are never cleaned except when the thing is over-flowing. I have known men to lose time because the wind was blowing in a certain direction, and the smell from those out-houses came in through their bed-rooms and they had to shift their children and themselves to the other side of the house, the smell coming from those dry closets. Now, we say that if you want to get the best out of a man, you want to give him the best home possible. The miners down there are not averse to paying for a good home. They want good homes. There has been a nursery tale peddled throughout this country about the miners getting cheap coal and cheap rent. The miners of Nova Scotia are living in the dearest houses in Canada.

By Mr. Maharg:

Q. What rent are they paying—A. Around \$6 or \$7 a month.

Q. Can you give us any idea as to the cost of these houses?—A. They are assessed at \$500.00. The houses are built double, that is, back to back, two houses.

By the Acting Chairman:

Q. Back to back?—A. Side by side.

By Mr. Douglas:

Q. You mean that they are two families in each block, and then there is another block just back of that?—A. Back of that. The block itself is assessed at \$1,000, as I understand, by the town of Glace Bay; that is \$500 that the house is assessed at, that the man occupies. That is the worth of his house. They tried to put the assessment of those houses up. The town went into the courts, and they lost. The courts thought that the house was worth \$500. Nobody would give them \$500 for it.

By Mr. Chisholm:

Q. My understanding is that these matters of hygiene are municipal matters.—A. I think they are.

Q. Did it ever occur to you that possibly the municipalities have control over these things according to the laws of the province? There is control of these things, and somebody should be compelled to put your town in a hygienic condition.—A. I do not know who is.

Q. Somebody should compel the company if they are the owners. I know there is a law in the province.—A. There is a Health Act.

[Mr. J. B. McLachlan.]

Q. And the machinery is there. Is it not a strange thing that the machinery has never been invoked, put into action, so as to compel proper hygienic conditions?—A. The company there own the street and houses and everything.

Q. Even so this law compels everybody, you and me and everybody else to keep our houses and our surroundings in a proper hygienic condition. We have sanitary inspectors and so forth. My knowledge is taken from the municipalities in my own country. When the municipal council meet they appoint a sanitary inspector for every district or town as the case may be, and his duty is to watch these things, and when he detects anything wrong, the property owner is compelled to put his property in a hygienic condition. I refer to that so that the committee may know that we are not living in darkest Africa down there, that we have laws which should be carried out.—A. The men themselves pay for the cleaning of those dry closets and they have the say-so when they will be cleaned.

By the Acting Chairman:

Q. Then there is no municipal machinery?—A. There may be—

Mr. CHISHOLM: Perhaps it is unfair to ask Mr. McLachlan about these details. There is a law.

The CHAIRMAN: We cannot interfere with municipal affairs at all. But I think that the publicity which this will get may have a very desired effect. My own view is that I would rather see the men take a lower rate of wages and have healthy homes and surroundings. These to my mind are most important. No wages can compensate for the lack of healthy surroundings. It may be that some of these houses are owned by the miners themselves, and they might not have the money to put up to modernize them. But there is always a way of overcoming that. They can issue debentures against the property payable in seven or ten years, and charge so much per year in taxes. In that way the houses could be modernized. As for the company, I cannot understand a company keeping men in this condition if it is as you say, and it is a very wrong principle to work under, from my view.

WITNESS: In regard to this efficiency of production. These are things I am pointing out that lower production, lessen a man's efficiency, and of course lessen production. There are one or two other things which have been introduced lately in the Glace Bay district which have lowered the production of the men. They have hired a very large official staff lately. They call them checkers. These men go around the mines, and they have nothing to do in the way of manual labour at all. They keep tab on how much you are doing and how much the other man is doing through the mines, and because these men are in there, the production per man is being lowered and they are very irritating to the men themselves. They pry into the men's affairs, when they are going home, and the ordinary miner who is a contract man who wants to go home when he feels like it—

By the Acting Chairman:

Q. Just hold on a minute. You say he wants to go home? Can the men go home at any time?—A. Yes.

Q. There are other men being paid a daily wage, are there, both in the shaft and above who are dependent upon his work?—A. Yes.

Q. Would that daily wage go on when this man is off?—A. Yes, if a man gets sick—

Q. I do not mean if a man gets sick.—A. The men generally stay their hours unless something like that occurs. Of course, they may leave twenty minutes or half an hour earlier on some days, on account of the air. The air there is worse on some days than on others. They get what they call "done" air. Or their place may be cut.

Q. What do you mean?—A. Well, supposing a man cuts twenty or thirty feet,

[Mr. J. B. McLachlan.]

and he is cutting by machinery that is operated by compressed air. That air may be carried into him a mile and a half or two miles. Some days that air may be very good, and he gets along fine, and the next day he may stay there till the last minute, and only earn half a day's pay because of the bad air.

Q. You made a statement that his cut may be finished?—A. Yes.

Q. Is that a certain area that is allotted to him, or does he finish his day's work?

—A. He can stay until his cut is cleared out.

Mr. MAHARG: That would not apply to your case, Doctor, because the coal is still there.

The ACTING CHAIRMAN: Yes, but if he wants to leave his work half done—

By Mr. Maharg:

Q. Does his quitting interfere with the workings of the mine in any way?—A. They are cutting, and they quit when they are done. There is another difficulty they have had lately that has reduced the production per man—I am trying to show that the production per man—

Q. Let us finish up this other thing. Just why does it lower production or decrease the efficiency? Do these men interfere with other work in any way, or make the men go back and finish up, or what?—A. If you have one hundred tons coming out of a mine, and one hundred men employed, it is one ton per man. If you hire four or five men to keep tab on them the production is lowered.

Q. Because it is spread over a greater number of men?—A. Yes.

Q. Not because these inspectors interfere with your work at all?—A. They do interfere to a certain extent too.

By Mr. Douglas (Cape Breton):

Q. How many of these checkers do they have in that mine? This is all just lately?—A. It is a sort of a new institution. I cannot tell. The men themselves do not know. They do not know exactly what a man is. He is in there, and is walking around like a stick.

Q. What are they, spies?—A. I would say they are spies.

By Mr. Chisholm:

Q. Do you know anything about their duties? Have they any particular duties, do you know?—A. They talk very sharp to the men; they ask the men any questions. The men do not know who they are.

By Mr. Maharg:

Q. Do they demand an answer to their questions?—A. Yes, and sometimes they get them.

Mr. CHISHOLM: Sometimes they get answer that they do not look for?

The ACTING CHAIRMAN: There are only four minutes left, when we can legally sit, because the House has not given us permission to sit while it is sitting. I thought perhaps we could finish with Mr. McLachlan, and then continue at seven o'clock.

Mr. DOUGLAS (Cape Breton): How would it be to sit to-morrow morning? The House is sitting to-morrow afternoon?

Mr. MAHARG: Yes, at two o'clock.

The ACTING CHAIRMAN: I do not know what is doing to-morrow morning. I understand the chairman has filled up the whole of next week. I thought we might meet to-night at seven until eight, and then if we cannot get through we can see about to-morrow morning.

Mr. MAHARG: I rather think I will not be able to be here this evening between seven and eight.

Mr. DOUGLAS (Cape Breton): I think to-morrow would be better.

[Mr. J. B. McLachlan.]

Mr. MAHARG: We have not in the past arranged anything for Saturdays.

The ACTING CHAIRMAN: Well, what are your views, Mr. McKenzie, as to meeting to-night at seven or to-morrow morning?

Mr. McKENZIE: It depends on these men, if they are willing to stay over until Monday—

The ACTING CHAIRMAN: We have to take another side of it. We are not expected to waste any more of the people's money than we can help, and these people have to be paid their per diem, and we have to keep taxes down as much as we can.

Mr. McKENZIE: I am willing to meet at seven o'clock to-night, if you are.

Mr. MAHARG: Could we not get in touch with the chairman, and find out what he has arranged for to-morrow?

The ACTING CHAIRMAN: I suggest that we meet to-night at seven, if possible, for a short time, and we can find out in the meantime what the chairman has arranged for to-morrow.

WITNESS: I want to say something about the company's earnings.

Mr. MAHARG: It is nearly three o'clock. If you are going on with another phase of the question—

The ACTING CHAIRMAN: Supposing we adjourn now and meet at seven o'clock, and you try to be here if you can, Mr. Maharg, and I will try to get in touch with the chairman and see what his programme is. On Monday we have water transportation or peat.

Mr. MAHARG: An hour will not clean this situation up.

Mr. DOUGLAS (Cape Breton): Mr. Delaney is here too.

The ACTING CHAIRMAN: What do you move, gentlemen?

Mr. MAHARG: If there is nothing for to-morrow, we might meet to-morrow at ten-thirty or eleven. There will be no other committees meeting.

The ACTING CHAIRMAN: Have you any motion?

Mr. MAHARG: I move, we meet to-morrow morning at ten-thirty.

Mr. DOUGLAS (Cape Breton): I second that motion.

The ACTING CHAIRMAN: Any discussion?

Carried.

The committee adjourned until Saturday, May 7th, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM No. 425,

SATURDAY, May 7, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at 10.40.

Mr. DOUGLAS (Cape Breton): I move that Dr. Cowan be appointed Chairman this morning.

Mr. MAHARG: I second the motion.

Motion agreed to.

Mr. COWAN assumed the Chair.

The ACTING CHAIRMAN: Gentlemen, we will please come to order. Mr. McLachlan is here. He was on the stand yesterday, and I will ask him to resume this morning.

J. B. McLACHLAN recalled.

By the Acting Chairman:

Q. Mr. McLachlan, you were just starting out with some statement——

Mr. DOUGLAS (Cape Breton): I think he was giving some information about checkers.

Mr. MAHARG: He was just going to give us some information on some of the causes of reductions.

By Mr. Maharg:

Q. You were following that through, Mr. McLachlan, and I understand were going to start on another phase of it.—A. Yes. There is another class of labour that has been employed there unnecessarily. They are called "the Coal Company's Policemen." They are non-producers in the true sense of the word, and when you average up the output per man, these men are included. These men are paid by the coal company.

By the Acting Chairman:

Q. What was the reason these men were put on? Had there been anything done by the men that required their appointment?—A. Nothing that I know of.

Q. There was no reason given for it?—A. None whatever—well, the reason given was that they are there to protect the Coal Company's property.

By Mr. Douglas (Cape Breton):

Q. How many have they got, Mr. McLachlan?—A. They are taking on new men all the time. I see new men every day. I would say there would be probably seventy-five men.

Q. Seventy-five policemen?—A. Yes. These men some years ago were put on by the Company, and the employees raised very strong objections to them, following the employees around the yard, watching their meetings and things of that kind, and about a year ago the company consented to lay them off. They were all laid off. After they had been off about a year, Mr. Wolvin consented to their being taken on again, and they have been taken on.

[Mr. J. B. McLachlan.]

By Mr. Douglas (Cape Breton):

Q. That is only recently?—A. That is only recently, and they are still taking new men on. That is one reason for the increased cost of lowered production. The men take the stand that they should have the same protection as other citizens of that town exactly. That is about all I have to say on the production end of it.

Q. Speaking of policemen: You are now referring to the Dominion Coal Company?—A. Yes.

Q. Would the same remarks apply to the Nova Scotia Steel Company?—A. No.

Q. Or the Acadia Coal Company, or any of the other collieries of Nova Scotia?—A. No, I do not think so. They may have one or two men—the Nova Scotia people—they have had them for years.

Q. They have no police system anywhere else excepting at the Dominion Coal Company's works?—A. No.

Q. Do they have at the Dominion Iron and Steel Company?—A. They have them at the Steel Company's works too.

Q. Just as many?—A. Well, I am not so well acquainted there, but there are always a large number of men in evidence when you go in. I said yesterday, when we closed, that I wanted to say a little about the Coal Company's earnings. This statement I am quoting from now is the annual report and statement of the Dominion Steel Corporation and subsidiary Companies, and is dated, March 31, 1921. Under the heading of "Comparative Statement of Earnings, Charges, Dividends, and Surpluses, for the years 1916, 1917, 1918, 1919 and 1920," after deducting all manufacturing, selling, and administrative expenses, Government taxes, provisions for sinking fund, exhaustion of minerals, depreciation, interest on bonds and loans, proportion of discount on bonds and notes sold, the net earnings for these years are as follows: For 1916, \$3,995,225.40; 1917, their net earnings were \$9,551,165.70; In 1918 \$8,581,660.93; In 1919, \$6,450,468.22; In 1920, \$3,261,613.72, or a total for these five years of \$31,840,133.97. The surpluses for these years—they carried a balance over from 1915 to 1916 of \$1,022,163.61. The surplus grew in 1916 to \$4,037,389.01; in 1917, the surplus was \$11,937,577.71; in 1918, \$13,754,157.26; in 1919, \$17,459,251.98, and in 1920, \$8,211,236.58. There was an adjustment made in the year 1919, of these surpluses and there was a deduction transferred to a special reserve fund of one million dollars, and to the general reserve fund \$8,500,000, or a total of \$9,500,000 to these two reserve funds that was brought down in 1920. The point I want to make is this: Someone said to this Committee that they did not think it would be wise to suggest to the miners that there should be any change in the contract rates for the lowering of wages; that that suggestion should come to the miners. I want to agree with that statement. It would be a very unwise thing for this company to suggest to the miners that they should accept a reduction of the rates we have put in.

By Mr. Douglas (Cape Breton):

Q. That is, in view of that statement?—A. In view of this statement. We say that this Coal Company—I do not like to refer to any person's war record; men have made great sacrifices; but if this is a sacrifice during the war, then lots of business men in this country would be glad to go in for a lot more sacrificing; if this is shooting up business, then lots of people would like to have their business shot up. The surpluses grew from practically one million dollars to seventeen million in five years, and that is a sacrifice that people do not generally suffer in this country. One other point I want to make is that I do not believe that the Dominion Coal Company are doing anything other than holding up the men during these idle times, to get them to "come across," and sacrifice some of their wages. I do not know whether they were holding up the country for a higher price, but it will take a good lot of argument to convince the people that the seventeen million dollars reserve funds were not holding

[Mr. J. B. McLachlan].

up the employees for reduction. They could have put that coal on the banks and kept these men working. They had the money to do it.

Q. Is the statement you are quoting from, Mr. McLachlan, that of the Dominion Coal?—A. It is the Dominion Steel Corporation, and all the subsidiary companies, including the Dominion Coal.

By Mr. Hocken:

Q. Mr. McLachlan, is it your argument that the company should produce coal at a loss and take that loss out of the reserve?—A. Produce it at a loss?

Q. Yes.—A. No, I do not think they should produce coal at a loss; I do not think they should.

Q. But they might produce it without profit for a while?

By the Acting Chairman:

Q. I gather from this that they could produce it at a lower rate than they are doing now, and not suffer any loss?—A. If I may amplify my point, it is this: that they were losing money by keeping the mines idle because the costs went up, and while my opinion may be wrong, it is my opinion that they lose more money by keeping the mines idle than if they had banked that coal, and sold it for what they could get for it.

By Mr. Hocken:

Q. Why did they not go on and produce normally?—A. They were suggesting to the men in the most forcible language they could use that we should "come across," and beg for them to give us work at the lower wage.

Q. Had the price of coal dropped?—A. It had dropped considerably, but it was dropping from an abnormally high point.

By Mr. Douglas (Cape Breton):

Q. It did not drop as far as the offer which they made was concerned, to sell coal to the Canadian National Railways?—A. No, it did not drop. The Fuel Controller's price for the Dominion Coal Company was four dollars and fifty cents during the war, and up to the finish of the war. The Fuel Controller had auditors going over the books and fixed that price, and he was allowing the coal company ten per cent on their invested capital.

By Mr. Hocken:

Q. But they made the sale of coal at four dollars and fifty cents?—A. The sale of coal at Sydney, at four dollars and fifty cents.

By the Acting Chairman:

Q. When was that?—A. During the war, and up to the finish of the war; during the time of the Fuel Controller's term of office.

Q. Then the difficult natural conditions which it is asserted prevail there could not have prevailed at that time? How is it that it was possible to mine coal at that cost, at that time, and it is not possible to mine it now—apart from wages?—A. I do not see any reason why they cannot. They should be able to pay the wage rate they are paying, and should go on with the ten per cent. With that ten per cent, they should be able to do the thing just as reasonably as they have been doing it and make money.

By Mr. Douglas (Cape Breton):

Q. I think you gave a statement at the time of the Royal Commission in regard to what the coal was costing; at least a statement was put before the Royal Commission. Can you give us any information about that?—A. We did put in a statement to that effect.

[Mr. J. B. McLachlan].

By the Acting Chairman:

Q. You might tell us what Royal Commission this was? By whom was it appointed?—A. It was appointed by the Department of Labour.

Q. When?—A. They met in July, and had meetings in the latter part of July and August of last year, and an award was made by that Commission. I want to say this, that we have not any method of finding out the costs, and if this Committee wants the costs, there is only one source of getting the information, unless you want guesswork, and that is to get the cost-sheets, but this (indicating) is our line on the cost at that time.

Mr. HOCKEN: Can we get that?

The ACTING CHAIRMAN: Those have been ordered to be brought here.

WITNESS: We estimated that in nine typical mines, good and bad, the costs were as follows: the first mine, \$3.57—that is to put the coal in the cars—the second mine, \$4.18; the third mine, \$3.96; the fourth mine, \$4.60; the fifth mine, \$4.33; the sixth mine, \$5.42; seventh mine, \$4.01; eighth mine, \$4.98, and the ninth mine, \$4.71.

By Mr. Douglas (Cape Breton):

Q. Are these collieries numbered from one up to nine? Is that the way you have it?—A. That is how we put them in. We did not state what collieries they were.

Q. Your numbers do not correspond to the number of the collieries—A. Yes, but that statement was not challenged—

Q. What I mean, Mr. McLachlan,—you said mines numbered from one up to nine?—A. Yes.

Q. I understand the Dominion Coal Company has collieries numbered from one up to twenty-four?—A. Yes.

Q. Does your No. 1 there agree with the colliery called No. 1?—A. No.

Q. You have not done it that way?—A. No.

Q. You have taken these mines as typical?—A. Yes, typical mines. We called them first, second, third, and so on. These costs were made up this way: For labour \$2.30 per ton; material 41 cents per ton; miscellaneous 86 cents per ton, or a total \$3.57.

Q. Where does that deliver the coal to, did you say?—A. That pays for every operation underground. It takes it over the tippie, screens it, prepares it for the market and puts it in the car.

By Mr. Douglas (Cape Breton):

Q. That would not be the cost at the shipping pier?—A. No.

Q. That is on the rails?—A. That is on the rails at the mines.

By the Acting Chairman:

Q. But it does not take any notice of the overhead expense or anything of that kind.

By Mr. Hocken:

Q. Did you make an estimate of the overhead expenses?—A. That is interest charges.

Q. Management and insurance, and that kind of thing?—A. All of the management around the mine is included in that. All of the management and their office expenses.

Q. The management?—A. Yes, it is included in that cost.

By the Acting Chairman:

Q. According to their contention they should be able to deliver that coal, everything paid for, at that price, not considering the profit, of course?—A. The cost of labour had gone up since that time.

[Mr. J. B. McLachlan].

Q. What year was this?—A. This was in August, 1920. We got 55 cents on day labour and 10 cents on the ton.

By Mr. Douglas (Cape Breton):

Q. Roughly, what percentage of increase would there be since that time? I know you cannot give it very accurately. It would be very difficult to do it. Would it amount to 10 per cent?—A. The way we generally try to get at that thing, we take the number of tons produced per man. We say roughly they got 2,000 tons per man. The average wage for all of their employees would be, to make a liberal estimate, as was stated before this Committee, a liberal estimate was \$4.50. We say \$5 to-day. So that you have two tons of coal for \$4.50 in the car. That is the cost of labour for two tons of coal.

By Mr. Douglas (Cape Breton):

Q. Does that include depreciation?—A. I think it will.

By the Acting Chairman:

Q. I think depreciation is mentioned in there?—A. That is miscellaneous. In that item of 86 cents there is royalty and depreciation.

By Mr. Maharg:

Q. Where is the coal weighed? You say it goes over the screen; it is screened before it goes into the car. Has it been weighed previous to that or subsequent to that?—A. As a general thing it is weighed when it comes out of the mine. It comes off the cage and is hoisted and runs onto the weighing machine. Everything that is taken out of the mine is weighed.

Q. So that the miner gets paid for the first weight?—A. Yes.

Q. The slack, waste and everything is weighed?—A. Yes.

By the Acting Chairman:

Q. Is this a long ton?—A. Yes.

By Mr. Hocken:

Q. What proportion is there in slack and waste?—A. It would be very hard to say. There are different conditions of mining. They make more slack in some mines there. I would say about 30 per cent would be slack.

By the Acting Chairman:

Q. Are those all the same quality of coal? Are they all coals that would be used by the Canadian National Railway, for instance?—A. Oh, yes, the quality is the same.

By Mr. Douglas (Cape Breton):

Q. Some are better for steel-making purposes than others. That would be the only difference?—A. Yes. Of course there is a high percentage of sulphur. It is not good coal for making coke.

Q. You give the labour cost as \$2.30. Did you read Mr. Dick's evidence which was given before this Committee?—A. Well, no, I did not read it.

Q. He stated that the Dominion Coal Company sold their coal at Halifax at \$8.25, and their evidence was to show that the price of coal in Halifax was \$13, and \$13.50 and \$14 a ton. Do you know anything about that?—A. When this Commission was making inquiry we tried to show this, that the dealers in Halifax got more money for shovelling coal into a car, into a motor truck and dumping it into a man's cellar than the men got for undercutting it, shooting it, loading it and hauling it for a half-mile to two miles up the shaft and preparing it for market. In other words, they got more. The labour cost is \$2.30. They got coal f.o.b. Halifax at \$8.25, and they were selling it at \$12.50, which gave them a spread of \$4.25; \$4.25 for

[Mr. J. B. McLachlan.]

taking loose coal out of the car and putting it in the motor truck and dumping it into a man's cellar and \$2.30 for undercutting, shooting, loading, timbering, track-laying and all the miscellaneous jobs along that dig, and preparing this coal and putting it in the cars.

By the Acting Chairman:

Q. You are prepared to say that in your opinion the coal that the Canadian National Railways want can be delivered on car at \$5 a ton?—A. At the mine, yes I want to add something to that; I say it can be produced and put in the car at \$5 a ton, and the present wage rate maintained and the company have a fair, respectable profit.

Q. That is the long ton? The price quoted to the railway companies, as I understand it, was the short ton?—A. It is a difference of 240 pounds.

By Mr. Hocken:

Q. What is the average rate the men earn if they work the full week? Do they work that?—A. No, because in that schedule we always claim the rate is too low. We say that the contract men—if it is taken away from that contract worker and put out for a day or two days, or a day at day work the earning is reduced. The company concedes that the man is entitled to it, and they put the rate—it would be \$5.05 now.

Q. A day?—A. Yes

Q. Is that the daily average?—A. That is for eight hours' work.

Q. \$5 and how much?—A. \$5.05 a day. That is what the company allows the men, taking it from the face.

By the Acting Chairman:

Q. That would be according to their own reckoning what they would make?—A. According to the company's reckoning?

Q. Yes.—A. We always say that is too low, that there should be another dollar put on that.

Q. Something over \$30 a week?—A. I would say that the miners make, unless it is an abnormally bad place, they will make \$40 a week.

Q. Have you ever kept any account of the miner's earnings say in a year's time, the average over the period of a year?—A. No, we have not the facilities to collect that data. We are too poor to collect it. There are something like 5,000 men down there.

Q. Would you say that \$40 a week for 52 weeks of the year was the average wage, for a contract worker?—A. They never get 52 weeks in the year.

Q. The average in the year is what counts because if a man has seasonal occupation we must expect him to make a higher wage for that particular time. What I would like to get is the average yearly wage?—A. I don't think I could give that even approximately.

Q. It would not exceed \$40 a week for 52 weeks?—A. No. I have a report here by the Compensation Board, paying compensation claims, and they give the wage—I don't know how they make it out. I have not got it here, but they put the wage away down below \$40, and I take it that the man tries to get his 55 per cent of his earnings. He gets 55 per cent under our law of his earnings up to a maximum of \$1,200 a year.

By Mr. Hocken:

Q. Are the men asking for an increase on these rates?—A. Not now.

By the Acting Chairman:

Q. They are asking for work at the present rates?—A. Yes.

[Mr. J. B. McLachlan].

Q. That is the contract workers? They are the highest paid men of the lot?—
A. They are the highest paid men.

Q. Have you any idea of the average wage day labour is getting the year round?
—A. \$3.80 is their daily rate.

Q. And they don't get steady work the year around either?—A. No. Climatic conditions down there are pretty severe and it means laying off the men, and during recent years we have always had more or less dull times. There is one thing I want to say in connection with this, that the mine workers in the North American continent never get full time because the consumption of the North American continent is \$200,000,000 less than the capacity for production.

Q. Two hundred million tons?—A. Two hundred million tons, yes.

By Mr. Hocken:

Q. Is that so?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. Have you any statement, Mr. MacLaughlin, of the idle time?—A. I would say approximately during the last three months we have been working about half-time; some of them not that. No. 15 mine was completely shut down, involving 350 men. No. 11 mine had a stretch of almost four weeks of idle time; No. 24 was idle at one stretch about four weeks. The mines have had very hard times during this winter.

Q. You are referring to the Dominion Coal Company?—A. Dominion Coal Company.

Q. How about the Nova Scotia Steel?—A. They have had a great deal of dull time too, and the Jubilee mine there has been idle entirely.

The ACTING CHAIRMAN: Any other questions?

By Mr. Hocken:

Q. If the men were kept at work steadily their present wages would be satisfactory?—A. Satisfactory at the present time, yes.

Q. What we have been trying to find out is whether there is any way of keeping these mines, not only down there but in Alberta, working full time, because we have some evidence here that by doing so we can reduce the price, the cost of production would be less.—A. That is true. If the mines were running steadily the price would come down.

Q. If any way could be devised of bringing Nova Scotia coal further west it would assist in that way.

The ACTING CHAIRMAN: There is no question about that. It is all a question of selling their coal. That is all. You have to get the price to where you can sell.

Mr. HOCKEN: There should be some way of getting that into Ontario.

Mr. CHISHOLM: We have another witness here.

The ACTING CHAIRMAN: Any other questions? You have all your statement in, have you, Mr. MacLaughlin?

WITNESS: Yes, sir.

The ACTING CHAIRMAN: We will call the next witness. Have you given the statement of the wages in full?

WITNESS: Yes.

The ACTING CHAIRMAN: We will put this in the record.

Halifax, N.S., August 14, 1920.

The following figures are submitted to the Royal Commission inquiring into the demands of the Coal Miners of Nova Scotia to show the very unequal, and unreasonable division of wealth created by the Coal Trade.

[Mr. J. B. McLachlan].

The coal dealers of the city of Halifax have coal delivered f.o.b. at Halifax at \$8.25 per ton, and sell that coal to the public within the city limits at \$12.50, which price gives them a margin of \$4.25 to cover the cost of labour, material, etc.

The figures which follow are the cost for labour, material and miscellaneous in nine typical coal mines in Nova Scotia.

(1st) Mine	\$3.57	(6th) Mine	\$5.42
(2nd) " "	4.18	(7th) " "	4.01
(3rd) " "	3.96	(8th) " "	4.98
(4th) " "	3.60	(9th) " "	4.71
(5th) " "	4.33		

The average for the nine mines is \$4.30 $\frac{2}{3}$.

There are three items included in the cost of the above mines, as an example:

Labour	\$2.30 per ton
Material	.42 per ton
Miscellaneous	.86 per ton
Total	\$3.57

It must be understood this is the cost to the coal company to take one ton of coal out of the solid working face and place it in the car at the mine, and not the selling price at the mine.

We submit to the Commission that the figures already represented by us as to wages and selling price of coal, together with this criminal margin obtained by the Halifax dealers proves conclusively that the demand for \$1 per day increased on datal paid men, and 27 per cent increase on contract miners rates is not only fair, but ultra-conservative, and that this Commission could only consider us the very weakest kind of men, did we, for one moment, appear to be satisfied with one cent less than our demand calls for.

Witness retired.

W. P. DELANEY. Called, sworn and examined.

By the Chairman:

Q. You might tell us what position you hold?—A. Vice-President of the Mine Workers' Association, District Number 26.

By Mr. Douglas:

Q. And does that include the Maritime Provinces?—A. Yes.

By the Chairman:

Q. Are you a practical miner yourself?—A. No, I have been employed on the mechanical end of the work.

Q. If you have any statement to make you might make it?—A. Well, Mr. Chairman, and Gentlemen, I might say that there has been a lot of distress caused by the idleness in Cape Breton and Nova Scotia on account of the slack times during the winter, and it was with a view to seeing if there could be anything done to relieve this situation that we came here to give evidence. I do not remember of ever having gone through a period of this kind in Cape Breton or Nova Scotia in regard to the mining industry of late years; that is since the operations have gone on the basis of working the year round; in other words since the Steel Works started down there when they employ the men all the year round. It has been the custom in former years for the

[Mr. J. B. McLachlan].

Dominion Coal Company to bank coal all winter, and keep their mines going in full blast practically over the winter. I remember they had in the bank there 410,000 tons of coal. If they had banked that much coal this winter they would have practically kept the mines working, and there would have been no distress in the winter whatever.

Q. Did they bank any?—A. They banked 170,000 tons.

By Mr. Douglas:

Q. You are referring to the Dominion Coal Company when you make that statement?—A. Yes.

By the Chairman:

Q. You do not know why they abandoned that policy?—A. Only the information we had from Mr. McCann that they had not the money. They could not get the money.

By Mr. Douglas:

Q. Who is Mr. McCann?—A. Assistant General Manager of the Dominion Coal Company. I think that is his title.

By the Chairman:

Q. Do you know what this surplus is used for that we are told exists? Would that not be used for that purpose—for financing the Company to bank this coal?—A. I could not answer that question. The information we have was that they had one million dollars tied up in that bank of coal, and the banks refused to advance them any more money, that they were financially embarrassed as a corporation. That was the information we had.

Q. And the bank refused to advance to them?—A. Yes. Some reference was made yesterday by one of the Hon. Members in regard to that; if the men were working longer hours could they not produce more coal? The way the question arose, one of our members was speaking about the reduction of hours from ten to eight.

The CHAIRMAN: I asked that question myself.

WITNESS: Now the reports of the Province of Nova Scotia, the Government Department, show that since the eight hour day came into effect in Nova Scotia, the production per ton per man has not varied very much. It has been around 1.5 tons per man, and according to the report of the Government for last year it has gone up a little, 1.6, which really goes to show that the shorter hours the men are working has made them probably a little more efficient for the time they are working, and thereby the Company are reaping the benefit as well as the men in the matter of production.

By Mr. Chisholm:

Q. Is it not a fact that the work underground is harder on a man than it is overground? What I mean is this, that it is more difficult to work eight hours underground than it is overground?—A. Oh, yes, you have conditions underground to contend with, such as bad air.

Q. And that bears out your reference to efficiency?—A. Yes.

Q. When you stay too long underground your efficiency is decreased?—A. That is the point I want to make.

By the Chairman:

Q. Is the company satisfied with the eight hour system, or are they trying to re-establish the nine or ten hour system?—A. I have never head the question brought up.

Q. As to the matter of financing, I do not know that you can give us any information. It seems to me strange that they would stop banking this coal when they

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have such a large reserve. You say the banks won't finance them. What are these reserves for, do you know?—A. No.

Q. There is one reserve of a million and another reserve of eight million, and then we are told they closed the mines because they could not finance. It seems to me a strange thing that the banks will not advance money to a company in that position, and I would like to know why they need the advance if they have the reserve. Can anybody explain to me the reason?

Mr. MAHARG: The reserves are not in liquid assets, but reinvested.

The CHAIRMAN: Still, you can borrow money against them.

Mr. MAHARG: But I understood your question to be, why should they need the banks to finance them if they have these reserves.

Mr. HOCKEN: Perhaps Mr. McKenzie could give us some light on that; why did they not work all winter and get out a large supply of coal, four or five hundred thousand tons, because the bank would lend money against the stuff that is taken out.

Mr. McKENZIE: I know nothing whatever about the operation of the Dominion Coal Company. They are not in our County, and I have no acquaintance with them at all.

Mr. MAHARG: I think the Purchasing Agent of the Canadian Pacific gave us a partial answer to that. He stated that they had a tremendous supply on hand on account of the mildness of the winter. Their preparations for a severe winter left them with a large supply on hand, and he said they were not particular about placing contracts and were just taking the coal up, spot coal. I think he called it, but they had very large supplies on hand. That may apply to others, I do not know.

By Mr. Chisholm:

Q. You said that other years they banked it?—A. That year was an exceptional year; they had 410,000 tons in the bank.

Q. That is not the usual practice?—A. No, about 300,000 or 350,000 is about the quantity.

Q. This year it is particularly low?—A. Yes. They have two trestles for banking, and they only used one trestle this year, and that was not taxed to its limit or anything like it.

Q. With regard to the surpluses, I suppose we can get that from the auditors of the company when they come up here. They would be more likely to have knowledge of that question. It is very difficult for anybody outside of their own circle to have the information? (No answer).

Mr. DOUGLAS: When you are on the subject, in the annual report of the Dominion Steel Corporation, I notice in a comparison of consolidated balance sheets, "inventories, accounts receivable, and cash on deposit and invested, beginning in 1916, nine million dollars odd, 1917, fifteen million odd, 1918, twenty-one million, 1919 it was nineteen million, and in 1920 twenty-two million.

The CHAIRMAN: I do not know what liquid assets this company has, but this is a question of financing. The statement brings up another question to my mind as to whether or not the Canadian Banks are refusing at the present time to finance legitimate industry to a reasonable extent.

Mr. CHISHOLM: I think you will find that very true.

Mr. MAHARG: They are curtailing.

Mr. ROSS: Lending money on call in New York at high rates of interest.

Mr. CHISHOLM: And refusing legitimate investment in this Country.

The CHAIRMAN: It seems to me this is a legitimate industry, and that the banking of coal in this way is a perfectly legitimate business, and that the banks should not be permitted to refuse to advance against it. It is my own view, but I may be wrong.

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Mr. CHISHOLM: Why not get some high representative of the banks here to tell us what they are doing?

Mr. McKENZIE: As a matter of business you will find that the tendency or desire of any coal company to bank coal depends largely on their contracts. If they have good substantial contracts they do not hesitate to bank coal, but if they have no contracts the coal companies prefer to depend upon supplying small demands with the daily output of the mines, because if they have not got a place in sight to sell dumps of coal, they are not very anxious to make coal. I understand Mr. Dick and Mr. Wolvin to tell us the other day that they had no very heavy contracts, consequently they were not so very fond of banking coal. That may be their reason for not banking very much this year.

Mr. DOUGLAS: They were offered a six hundred thousand ton contract by the railway as of date March 2, according to the evidence of Mr. Vaughan.

Mr. McKENZIE: I am only giving you a general idea of my own knowledge of the operations of coal mines, not only the Dominion, but every coal mine in Nova Scotia. Their banking depends largely on their contract.

By Mr. Hocken:

Q. Does the coal deteriorate on the bank?—A. It may, but in a very small percentage.

By the Acting Chairman:

Q. What would be the additional cost in the retail price for coal taken from the bank and rehandled for shipment? Is it an expensive process, the banking?—A. I do not know that there would be any difference.

Q. There would be the handling?—A. I cannot give you an estimate of just what it would be.

Q. The cost of banking would not exceed the loss sustained by the closing down of the mines, that is to the company?—A. It would not exceed?

Q. In your opinion it would not exceed the loss caused by the closing down of the mines?—A. Oh no.

Mr. DOUGLAS: Do you mean Mr. Chairman whether the banking of the coal entails an extra cost.

The ACTING CHAIRMAN: What I mean is that to my mind it would cost a little more to bank this coal and rehandle it. There is also a certain loss admitted by the closing of the mines to the company. Would the banking of the coal mean more, would the extra cost be greater than the company suffers by the closing of the mines down? Is there anything further that you wish to say?

WITNESS: Mention was made yesterday in regard to the conditions under which the miners are working, and particular stress was laid on the condition of the miners' houses and the conditions under which they are living down there. I would like to read an extract from a report of the Royal Commission which sat last year and made an investigation of these houses, so that the Committee will be familiar with them and know that it is not coming from the men this, but from a Commission appointed by the Department of Labour to make an investigation. It says:

With regard to category two, housing and other living conditions, we find: That in view of the fact that the housing domestic surroundings and sanitary conditions of the miners are, with few exceptions, absolutely wretched, and that such conditions have a deterrent effect in the miners' ability to produce coal, and are a menace to themselves and families, and further, that children brought up in such an environment have not the same chance of life and health as children reared under better conditions, as proven by Government statistics as to infant mortality, it is therefore recommended that the companies that

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own the houses put and keep them in proper repair and that a sewerage system be devised and inaugurated whereby surface closets will be eliminated, or that installation of a modern septic sewerage system be provided where it is found that the ordinary sewerage system is not feasible. Suitable kitchens should also be provided where they do not now exist. In the matter of water facilities for the houses of the mine owners, your Commission recommend that an adequate supply be furnished and so conveniently located that the miners and their families may avail themselves of it. Pure water which is an essential, should be supplied each family in a quantity sufficient for all purposes of domestic use."

With regard to this water, there are some sections in Cape Breton where they have not water at all. It is hard to get it, and it might entail a little expense to get it. The company have still the system in force of going around with a puncheon and delivering water to the houses. When they have not a puncheon on the road they have a steel tank. This is the system used in some parts of the district down there in supplying water to the houses. Again, in regard to the recommendation of this Commission, the company took up the matter of improvements to the houses. It seems that we only get to a certain point; that is, they would like to do something if they had the money, and negotiations are broken off. We have had the housing question up with the company on different occasions, talking it over to see if something could not be done, but it always appears that there is no money to do the work with.

By Mr. McKenzie:

Q. Glace Bay gets its water supply from some lake?—A. Sand Lake.

Q. Is there plenty of water there?—A. In Sand Lake there is, but—

Q. It is all one municipal system; it is all in the town of Glace Bay.—A. The reserve is not. The reserve is in the county.

Q. But Caledonia and Glace Bay and Bridgeport?—A. And No. 2.

Q. New Aberdeen, as it is called?—A. Yes.

Q. That is all Glace Bay?—A. Yes.

Q. And it is all under one corporation?—A. Yes.

Q. Are the people within the town limits well supplied with water?—A. Yes, there is not very much complaint now about the water supply. The big question is the town of Glace Bay is the sewerage.

Q. That is a matter for the corporation, is it not?—A. Well, yes.

By Mr. Hocken:

Q. Have they no sewerage system?—A. The town proper has, but in the mining parts of the town, or in the outskirts of the town, they have no sewerage system, that is in those mining parts.

By Mr. Chisholm:

Q. What places had the Commission in view when they made that report?—A. We had them through the reserve, No. 11, No. 1 and No. 2. We took them all through the mining parts.

Q. What particular zone had the Commission in view? You say that Glace Bay is all right so far as water is concerned.—A. In regard to the water supply, but it was the reserve.

Q. Is it difficult to get a water supply in the reserve?—A. It would entail the laying of a pipe line probably two miles.

Q. That would not be a very colossal undertaking?—A. No.

Mr. CHISHOLM: We get water for the town of Inverness fully that distance.

Q. If the reserve is going to have a proper water supply and sewage system, the company would have to do that; there is no corporation to do it. The town of Glace Bay does not take it in.—A. The reserve. No, the reserve is on the outskirts.

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Q. The reserve is not incorporated?—A. No.

Q. Has there been any proposal that the company do that, take in hand the putting in of a sewage system and a water supply in the reserve?—A. We have negotiated with the company in regard to these, and they have gone into the matter and made estimates, but that is as far as they have ever gone.

By Mr. Chisholm:

Q. Do they acknowledge responsibility for this undertaking?—A. No, they don't.

Q. What do they say? What I want to know is, does the company recognize that it is their duty to do this, to give that particular section proper water and proper sewage conditions?—A. They feel that the town and the municipality are responsible for this thing.

By the Acting Chairman:

Q. Which?—A. The town or the municipality.

By Mr. Chisholm:

Q. That is, it is within the municipality of the county?—A. Yes. They feel that something must be done; they acknowledge their responsibility to that extent

By the Acting Chairman:

Q. In other words, they are passing the buck from one to the other?—A. That is what it looks like.

By Mr. Ross:

Q. Have they ever approached the municipalities in which these mines are, and asked them to look into this matter?—A. I could not say.

Q. How many miners are in these places that are not served?—A. In the reserve, I would say there was in the vicinity of 450 men.

Q. Miners and their families?—A. Yes.

Q. How many in the others?—A. In the Glace Bay district there would probably be—the population of Glace Bay is in the vicinity of 17,000.

Q. I mean in the reserve, this other place that you referred to.—A. Those other mines are in the town of Glace Bay.

Q. They have sewage and water?—A. They have water, but no sewage.

Q. Do you not think it would be a good thing for the miners to approach the company and the municipalities in those places and have a joint undertaking?—A. The men have approached the company, and agreed to pay additional rent if these facilities were provided.

Q. But you do not know whether the company has ever approached the municipalities to assist them? Would not that be a businesslike thing to do, to get the company to do that, to urge the company or suggest that the municipalities jointly undertake this enterprise?—A. It might, and it might not. The stand we take is that we have to get something done, and if the company show a willingness to do something, we would feel grateful to them. But that is about all they have ever done, expressed their willingness.

By Mr. Chisholm:

Q. You are a municipality?

The ACTING CHAIRMAN: That is the point I took. I do not think that the company has any special right in the matter at all. The municipality is the governing body, and it is the party that should see to the matter of health and sanitation.

By Mr. Chisholm:

Q. What is the proportion of taxation paid by the company as compared with that is paid by those who are not employed? Take the town of Glace Bay. There is

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a large population that is not directly connected with the mines. What I want to know is, what is the relative taxation of the company as compared with the taxation of those outside the mines? Perhaps I am not making myself clear.—A. I understand what you mean. I cannot answer that question only in this way. In the town of Glace Bay about 70 per cent of the people are poll tax payers.

Q. Suppose that 70 per cent of the population used its power at the polls during the municipal elections and elected their own men, their own councillors. I am not a lawyer, but having elected your own councillors could not these men force the company to put those things in?

The ACTING CHAIRMAN: I am afraid that would not work out. When you get down to money by-laws, at least in our part of the country, the men who pay poll tax do not vote on those by-laws.

Mr. McKENZIE: We have a different law in Nova Scotia; every man has a right to vote.

The ACTING CHAIRMAN: Not on the expenditure of money.

Mr. HOCKEN: Is there not a health board in Nova Scotia?

Mr. CHISHOLM: I should say so.

Mr. McKENZIE: In Nova Scotia every man has a right to go to the poll and has the same say as to town expenditures.

Mr. DOUGLAS: If a town wants to borrow \$100,000, a resolution is passed by the town council. The resolution is sent to the local Legislature and authority is given to borrow the money, provided that a meeting of the rate-payers of the town be properly called, and so on. The majority of the rate-payers indicate that they desire this money to be borrowed for this particular purpose.

The ACTING CHAIRMAN: I should think under that system you would never get anything done.

Mr. McKENZIE: Anybody whose name is on the Voters List can come and vote at that meeting.

Mr. CHISHOLM: Mr. Chairman, following my contention, I will say that if seventy per cent of the people down there make up their minds that they will have certain improvements they can force these improvements on the company, whether the company likes it or not. Of course, they have to pay their own share of the expense, but that is what the witness said, that they were prepared to pay more taxation. I would make the company do it through the ballot.

Mr. McKENZIE: That is all right for what is within the municipality of the town or city of Glace Bay, but it is not so simple outside.

Mr. CHISHOLM: No, it is all right when they are in the municipality.

Mr. McKENZIE: But there is no machinery in the municipality to handle it outside.

WITNESS: In Mr. Baxter's closing remarks yesterday, he asked this Committee to use their influence with the Government and the Canadian National Railway Board in regard to the placing of orders for coal to relieve the situation down in Nova Scotia and by having those orders given to the different companies we would get the mines started up on a working basis again. But there is another factor entering into the coal mining industry down in our part of the country, and that is, the making of steel. Now, I think the evidence was given here by Mr. Wolvin, which I think is true, that in the manufacture of steel it takes four tons of coal for every ton of steel.

The ACTING CHAIRMAN: He said four and a quarter tons.

WITNESS: Four and a quarter tons, yes. Well, if some influence could be brought to bear by this Committee upon the Government or the Railway Board to have some orders placed for steel rails at the present time, which I think the railways are badly in need of, it would further help to relieve the situation by supplying coal to the steel works, which have been down for a considerable period of time, and which would then be started up again.

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Mr. DOUGLAS (Cape Breton): The Government and the railways, Mr. Delaney, have been offering contracts for almost two months, and the Dominion Coal will not accept them.

Mr. CHISHOLM: What is the trouble, Mr. Douglas?

Mr. DOUGLAS (Cape Breton): It is a question of price.

The ACTING CHAIRMAN: I understand they were asking sixty-two dollars and a half.

Mr. DOUGLAS: They gave an order to the Algoma for fifty thousand tons at fifty-five dollars, and I understand it was open to the Dominion Iron and Steel Company to take a similar amount at the same price.

Mr. MCKENZIE: It was refused?

Mr. DOUGLAS (Cape Breton): It was refused, but I think they are now ready to take it.

WITNESS: Apart from the company's side of it, whether they were willing to do it or not to do it, I think that if the Committee could bring some influence to bear, it would be a mere act of justice to the people of Nova Scotia to have these steel works started up again.

Mr. MCKENZIE: I understood from the talk last night that quite a number of miles are to be laid in the west this year—somewhere about two hundred miles. Did I not understand that from the Minister last night? I believe there are no rails in sight for this laying at all.

The ACTING CHAIRMAN: I understand those fifty thousand tons are to be applied in that, but how far that will go, I do not know.

Mr. HOCKEN: It was stated in the Special Committee investigating the railways the other day that the National Railways wanted one hundred thousand tons, and their policy was to take as many as they could from the Algoma Company for the west because of the caving in the transporting charges, and they are ready to place an order for one hundred thousand tons in Nova Scotia, but they could not get the price.

Mr. MCKENZIE: How far would the haul be from Vancouver, or any place in British Columbia, to any place in the west, where rails are to be laid this year?

The ACTING CHAIRMAN: It would be very expensive hauling them up the mountains it would be about twelve hundred miles.

Mr. MAHARG: Where to?

The ACTING CHAIRMAN: Over the mountains.

Mr. MAHARG: Why, it is less than eleven hundred miles to Moose Jaw from Vancouver. It is ten hundred and some odd miles. The greater portion of that steel is for use in Alberta, and would only have to come five or six hundred miles.

The ACTING CHAIRMAN: But it is a very expensive haul?

Mr. MAHARG: Yes.

Mr. MCKENZIE: When the Panama Canal was opened, the Nova Scotia people delivered rails by water. It might be cheaper to get them that way than to haul them all the way by rail.

The ACTING CHAIRMAN: You will probably remember that when Mr. Wolvin was on the witness stand I drew his attention to the fact, that the day before an order for fifty thousand tons had been placed with the Algoma Steel Company at fifty-five dollars a ton, and he said he was prepared to accept an order like that then. If that correct, there should be no difficulty in placing that order.

Mr. HOCKEN: The Minister of Railways made that statement to the Committee.

The ACTING CHAIRMAN: There should be no difficulty whatever. I think Mr. Wolvin made that statement.

Mr. CHISHOLM: I understand negotiations are going on now between the railways and the Dominion Steel.

[Mr. W. P. Delaney].

By the Acting Chairman:

Q. Have you anything further to say, Mr. Delaney?—A. I think the whole thing has been pretty well covered.

THE ACTING CHAIRMAN: Are there any further questions to ask this witness?

Mr. MAHARG: I might ask the witness one or two general questions on the general situation.

By Mr. Maharg:

Q. What are the general conditions of the miners as a whole; that is as to their general conditions? Are they prosperous or otherwise? Do you think they are, as a whole, laying by a competence, as it were, for future days, or is it just a steady grind from hand to mouth?—A. Well, in the majority of cases it is an uphill fight.

Q. They are not getting ahead and making provisions for the future at all—in a general way?—A. No, the miners are generally men of large families—

Mr. CHISHOLM: God bless them for that.

By the Acting Chairman:

Q. Do any of them own their own homes?—A. Some of them, but not a very large percentage. They do not get the chance.

By Mr. Maharg:

Q. Then, the general argument as I understand it from all of you men is that even if the cost of living does go down considerably, in order to have the miners live comfortably, you cannot stand a reduction in wages: even with the cost of living going down—not back to where it was, but say going down halfway to where it was—if it went up one hundred per cent, say it goes back fifty per cent—could the miners then stand a reduction in wages, and still live comfortably?—A. In answer to that question, I might say that our policy is, and our fight is to try to increase the standard of living of the miners, and what we have really been doing in the past has been following up the cost of living; we have never passed it, we never had the chance to pass it, and if there was such a thing as a decline in the cost of living, and we could maintain our wage rate for a certain period, it would be that much in favour of increasing or raising the standard of living of the miners.

Q. I might ask you another question, and I will not press for an answer, as it may be a delicate matter for you to discuss, but are the miners, as a class, fairly thrifty? That is, do they spend their money in a judicious way, or do they lavish it on expenditures they could get along without?—A. I do not know that they do.

Q. Not any more than any other class of men?—A. No, not as much as any other class of men, as a matter of fact.

By Mr. Hocken:

Q. What rent do they pay for their houses—what is the average?—A. Well, they pay all the way from—I guess the average would be around six dollars or six dollars and a half a month.

Mr. HOCKEN: That is a very important consideration, Mr. Chairman.

WITNESS: Another consideration is the kind of houses they are living in.

Mr. MAHARG: The evidence yesterday was, Mr. Hocken, that the houses are assessed at about five hundred dollars, and that was about the value of them as brought out at the investigation, so this rental is about on a par with other centres, according to valuation.

THE ACTING CHAIRMAN: Any other questions? Are you through with the witness? If you are through we will declare the witness discharged.

The Committee adjourned until Monday May 9, 1921, at 10.30 o'clock a.m.

[Mr. W. P. Delaney].

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

MONDAY, May 9, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future Fuel Supply of Canada met at 10.45 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will the Committee come to order. We have Mr. Anrep from the Department of Mines, who has been connected with the peat investigations for some time, as a witness this morning.

Mr. A. ANREP, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. My official position is peat specialist in connection with the Geological Survey.

Q. How long have you held that position?—A. I have held it for thirteen years on the first of May.

Q. Have you devoted all your attention to the peat question?—A. Entirely, in connection with the investigation of peat bogs, location of peat bogs, beginning in 1909, 1910 and 1911.

Q. What experience had you prior to your appointment for that work?—A. My experience prior was in investigations of peat bogs in Russia, Sweden, Denmark, Ireland, Scotland, and a little in England, because there are not very many peat bogs there.

Q. Are you a Canadian?—A. I am a Russian by birth, of Swedish parentage, and a British subject at the present time.

Q. Where did you get your preliminary training to fit you for investigations of that peat industry?—A. I got my preliminary training under my father's supervision, who was at that time the best known man on peat in Europe.

Q. He lived in Russia?—A. Russia, Moscow.

Q. What college training have you?—A. I had a complete education in arts and a scientific course in Sweden at the Government Peat School in connection with the erection of machines and practical training in investigations for various big firms like Sir William Ramsey and Sir Mackenzie Wallace in England, and several other well known concerns in Sweden.

Q. Investigations in the peat question?—A. Yes. Sir William Ramsey is a well known chemist.

Q. You have a statement prepared?—A. Yes.

Q. You might give that to the Committee now?—A. Several questions have been put before the Geological Survey, as well as before me, which I have put up here and wish to answer. There are four questions.

Q. By whom are these questions submitted?—A. They have been practically stated by the Geological Survey Department, and a copy has been given to the department.

Memorandum

The following questions to be answered at the Peat Investigation to be held by the House of Commons:—

1. *For what reason has Mr. Anrep been appointed as Peat Specialist to the Canadian Government.*

On the 12th June, 1906, a petition was signed by a large number of influential residents in different sections of the Dominion, asking for a thorough investigation

[Mr. A. Anrep.]

of the peat deposits of the country, which was addressed to the Honourable Frank Oliver, Minister of the Interior, and afterwards transferred for action to the Honourable W. Templeman, Minister of Mines. As a result of this petition, on the 14th of May, 1907, Mr. Eric Nystrom, M.E., of the Mines Branch was instructed by Dr. Eugene Haanel, the Director of the Mines Branch to proceed at the earliest moment to Sweden, Norway, Finland, Denmark, Germany, Holland, and Ireland for the purpose of studying and reporting upon the peat industry of these countries.

The result of Mr. Nystrom's investigation of the peat industry in these countries was the publishing of his report on Peat and Lignite. Their Manufacture and Uses in Europe.

While travelling in Europe Mr. Nystrom was advised to have a personal interview with my father, in Sweden, as it was thought he would gain more information by doing that than by relying upon correspondence.

The reason for Mr. Nystrom's immediate action in communicating in person with Mr. Anrep will be realized from the following brief description of Mr. Anrep, Sr's activities in northern Europe.

In 1880 Mr. Anrep built his first peat machine in Russia for Count Lebaschoff, Alexander III's aide-de-camp.

At the International Peat Machine Competition, 1883, at Bissereva, the Anrep machine received the highest award over eleven competitors representing the leading firms in Europe. In 1897, at the "Nischni-Nowgorad" exhibition, he received the large gold medal, and in 1901, over 1,000 of these peat machines were then in operation, having an aggregate production of about 4,000,000 tons of air-dried peat fuel by the Anrep System. In the vicinity of Moscow alone, there were at that time in operation about five hundred peat machines. Later these peat machines spread over the whole Russian empire, from Ural to the Baltic Sea, and from the Gulf of Finland to the Black Sea.

As a recognition of his work for the Russian peat industry, the inventor received in 1897 a life pension from Nicholas II. In 1900 through his business connection with Munktel's Foundry Works in Eskilstuna, Sweden, his machines were further improved, and a new type of single shaft peat machine was constructed and put on the market.

At the Gefle Exhibition, 1901, Anrep received King Oscar II's Cup of Honour "for successful labours for the advancement of the peat industry."

During the tests of different peat machines in 1904, on the Stafsjo peat bog near Ljungby, Sweden, which were held at the Government expense and under their control, the peat machine again received the highest award.

The leading firm in peat machines in Germany, viz: "Dolberg," in Rostock, made an arrangement with Anrep to manufacture machines according to his construction. Later on he worked in conjunction with Abjorn Anderson's Foundry Works in Svedala, and further improvements were made in details of construction. He also worked out means for transporting and spreading the pulped peat on the field. The inventor devoted his time in later years to an excavator specially adapted for use on our stumpy bogs. This was the only thing missing to complete the splendid method of manufacturing air-dried peat fuel. This is the construction that was introduced into Canada and has been tried at the Alfred peat bog, and accepted as an efficient apparatus by the Government Peat Committee.

As I was working under the supervision of my father, and had been given my entire time in connection with the development of the peat industry, I had a great deal to do with the investigation of peat bogs in Russia, Sweden, England, Ireland and Scotland, and on account of my personal experience and my father's European fame in connection with the manufacture of peat, I was asked to come to Canada, and to investigate peat bogs and erect the first Anrep air-drying plant in Canada.

[Mr. A. Anrep.]

2. What did Mr. Anrep's work consist of up to the present time?

May the 1st, 1908, I was appointed by the Mines Branch to start the investigation of the Canadian peat bogs and during that work to select a suitable bog for the erection of a peat fuel plant. While these investigations were carried on the equipment for the erection of the Anrep peat fuel plant arrived from Sweden. In the meantime it was considered wise to use the Anrep pulper in connection with the machinery which was formerly in operation at the Victoria Road peat bog, situated on the Grand Trunk railway line, Lorneville Junction to Cobocok, to try out Mr. E. V. Moore's system for the manufacture of peat fuel. It was soon found, however, that the condition of the plant was anything but good, and in order to make a fair trial of the plant more time and money than was available at that time would be required; the object being to manufacture sufficient peat fuel for the gas producer plant under erection, and to test the Anrep peat machine. This work was started in the early part of August. The peat machine fulfilled every expectation, and with proper arrangements could easily treat an amount of wet peat equivalent to 25-35 tons air-dried peat per day. The objection of the rest of the plant proved to be of a too complicated design. Even if the plant had been properly built, its practicability for the purpose was questionable.

In the beginning of the summer months of 1909 a few more peat bogs have been investigated in July and August. September and part of October were occupied in the development of the Government peat bog at Alfred, Ontario, and in the installation of the Anrep peat machine, with conveyor and platform which were removed from Victoria Road to Alfred. By the end of May, 1910, I completed the erection of the plant and the manufacture of peat for the first season was started and continued to the last day of August, 1910.

This plant was in actual operation during the year 1910-11, during which time 3,200 tons of peat with 25 per cent moisture were manufactured. Out of this 1,200 tons of peat were manufactured during the first year (1910) and sold at a price of \$3.50 per short ton in Ottawa.

In 1913 the plant was sold to a private company and operations have been conducted on a larger scale. Mechanical devices, e.g., a very efficient mechanical excavator (Anrep system) were substituted for the hand operated machines. With this plant the cost of manufacturing was expected to be reduced considerably.

The fuel manufactured by the Government at Alfred was sold to the general public in Ottawa and Alfred and also to the Public Works Department, and a considerable amount was used in the gas producers at the Fuel Testing Plant, which was erected in Ottawa in the same year as the plant at Alfred, and equipped with the necessary scrubber, tar extractor, etc., for demonstration purposes, and for making tests in the public interest.

At the beginning of the war the work in connection with further experiments in the manufacture of peat fuel at Alfred had to be discontinued owing to shortage of means.

On April 24, 1918, a joint peat committee was appointed by the Dominion and Ontario Governments.

In 1919 these Governments jointly erected two improved types of peat fuel plants at Alfred, Ontario, with the idea of obtaining accurate data as to the most efficient peat fuel plant to be introduced on this continent. The systems tried out are A. Anrep, Sr., and E. V. Moore.

The result of these investigations would be available from the Peat Committee.

Beginning with the year 1908 and during every summer up to the present time, investigations of peat bogs throughout the Dominion have been carried out, in order to ascertain the area, quality and depth, and the commercial value of the available bogs. The result of these investigations have been published by the Mines Branch, and further publications are expected to be issued by the Geological Survey, in the form of yearly bulletins.

[Mr. A. Anrep.]

Following is the total area investigated in each province, to the present time:—

In Ontario, approximately 112,243 acres estimated to produce, approximately, 97,025,000 tons of air-dried peat fuel, containing 25 per cent moisture and peat litter at 20 per cent moisture.

In Quebec, approximately 89,820 acres, estimated to produce, approximately, 86,742,000 tons of peat fuel containing 25 per cent moisture and peat litter at 20 per cent moisture.

In Prince Edward Island, approximately 5,356 acres, estimated to produce, approximately, 1,200,000 tons of peat fuel containing 25 per cent of moisture and peat litter containing 20 per cent moisture.

In Nova Scotia, approximately 6,671 acres, estimated to produce, approximately, 47,000,000 tons of peat fuel containing 25 per cent of moisture and peat litter containing 20 per cent moisture.

In New Brunswick, approximately 2,812 acres, estimated to produce, approximately, 2,002,000 tons of peat fuel containing 25 per cent moisture, and peat litter at 20 per cent moisture.

3. *The history of the peat industry in Canada previous to the time the Dominion Government took an active part in its development.*

In various parts of the provinces of Ontario and Quebec, previous to the year 1908, a great deal of experimenting had been carried on in connection with the manufacture of peat fuel, and it has been rumoured that over \$2,000,000 were spent uselessly on these experiments of trying out various inventions and also in the promotion of many wild-cat schemes.

During the investigation of the peat bogs, I was able to gather from lists of information the approximate expenditure which must have been incurred in connection with the erection of various peat fuel manufacturing plants in districts as follows:—

Beaverton, Ontario.	approximately..\$	45,000
Dorchester, Ontario.	"	40,000
Victoria Road, Ontario.	"	40,000
Guelph, Ontario.	"	45,000
Farnham, Quebec.	"	75,000
Lac du Bonnet, Manitoba.	"	45,000
Perth, Ontario.	"	45,000
Alfred, Ontario.	"	50,000
		<hr/>
		\$385,000

Welland, where it has been said there was spent over.	\$	200,000
Brockville, Ontario.		45,000
Rondeau, Ontario.		40,000
Julius, 200 miles east of Winnipeg.		35,000
Fort Francis, Ontario.		45,000
Newington, Ontario.		45,000
St. Hyacinthe, Quebec.		20,000
In New Brunswick alone was expended over.		150,000

Making a total of, approximately. \$ 965,000

The above does not include many other places where money has been sunk for the same purposes. The majority of these places have been burnt down and the others abandoned. From the above it can be seen that, approximately, one million dollars of public money can be traced as having been used in trying out various kinds of inventions for the purpose of manufacturing artificial dried peat fuel.

To prevent the general public from further useless expenditure the Dominion Government has deemed it wise to have the peat problem solved by experts of experience and knowledge.

4. *What are the future possibilities in connection with the development of the peat industry in Canada?*

There is a great deal to be said in favour of the development of our peat bogs, especially in a country like Canada where there is rapid industrial development and a constantly increasing population. Owing to the long winters we are dependent upon artificial heat in our dwellings, and for this reason a cheap fuel manufactured in our own country becomes one of the most important factors in the prosperity of the nation.

Unfortunately, our coal deposits are situated in the far east and far west, and the long haul necessary to bring this fuel to the central provinces makes the price of our own coal prohibitive, leaving us dependent upon the United States for supplying the quantity necessary for our comfort and for the maintenance of our industries.

To a certain extent nature has provided us with abundant and excellent peat deposits for fuel purposes, which are of a very great importance. Approximately speaking, it has been estimated that we have in Canada 37,000 square miles, of which only a fraction have been investigated up to the present. From this it can be readily seen that it is our duty to try to have our peat deposits developed in the shortest possible time and in such a manner as will aid our population in securing warmth and comfort. In addition we will have the advantage of the money spent in connection with the manufacture of peat fuel, and part of the capital used for the purchase of coal will be retained in this country.

It is our duty to stop and consider what would happen to us if the importation of coal from the United States should, under the present conditions, come to a standstill. It is a pity that many of us do not realize that our fuel resources in this part of Canada are very limited and that we import from the United States practically all the coal consumed in the provinces of Quebec and Ontario. Why not substitute certain amounts of this imported fuel, with peat from our own bogs and at the same time conserve our forests. Large quantities could be used through the entire farming district in smaller and larger towns for domestic purposes, such as using it in Quebec heaters, small stoves, cooking stoves, open grates, and even with proper care in furnaces, during the months of October, November, also March and April.

Of course, for the supply of fuel for industrial purposes we will always be more or less dependent upon our neighbour to the south; but we certainly should be able, to a large extent, to eliminate the importation of coal for domestic purposes which at present, drains this country of millions of dollars per annum.

I am not quoting the cost of the erection of a peat fuel plant or the cost of manufacture, neither at what price the peat has been manufactured at Alfred, and at what cost it was sold in Ottawa, as all those figures are available from the Peat Committee, and are not in my province at present.

(Signed) A. ANREP.

By the Chairman:

Q. Are you in a position to give us information on the subject of the cost of manufacture of peat?—A. I suppose I could, but it is really not in my province. Would I not be overstepping the rights of the Committee, because you see I have nothing to do with the Committee at present.

Q. Let me repeat to you the question that you have here, "Why not substitute certain amounts of this imported fuel with peat from our own bogs?"—A. Well, I don't see any reason why we should not do it.

Q. I presume we have to start with the fact that we have not got the manufactured peat available at the present time to substitute very much?—A. Yes.

[Mr. A. Anrep.]

Q. Why have we not?—A. For the simple reason that I don't think the people have taken to it. We have not advertised sufficiently. We have not given the people a chance to use it sufficiently. I know from experience that the little fuel we manufactured in 1909 and 1910, as well as this year, that all that peat was very welcome in Ottawa. Every bit of it was sold.

Q. And you produced how much?—A. Altogether.

Q. The maximum?—A. I presume last year it was about four thousand or five thousand tons, between four thousand and five thousand tons, and during the two years I manufactured it was 3,200 tons.

Q. The point is, I presume, you will argue it is possible to manufacture peat?—A. I think you will notice that from 1883 to 1901 in Russia—

Q. We are referring now to Canadian peat?—A. I was just going to give a little example. At that time peat was not manufactured there at all to speak of, and it was only a question of manufacturing machines. In a period of about twelve years they manufactured 4,000,000 tons.

Q. Yes, but in Ontario. You have been working for a long time?—A. Thirteen years.

Q. And for quite a few years before that experimentally?—A. Yes.

Q. With the peat industry we have reached a production of about four thousand or five thousand tons a year?—A. Yes.

Q. Is it your opinion that peat can be manufactured which will produce a reasonably good fuel, a reasonably good substitute for the fuel we are using in Ontario?—A. I think so.

Q. Why is it not being done?—A. In the first place, I think we are too conservative. It takes a long time for us to get accustomed to something new.

Q. There would be no trouble selling all the product?—A. None whatever. There has never been any trouble.

Q. Why was it not produced? A market existed?—A. The first thing is because people do not like to invest their money on small interest. It was openly shown to the public that they would never receive more than six per cent or seven per cent interest on the capital.

Q. This Government plant is really an experimenting plant?—A. Experimenting plant.

Q. And for the peat industry to be carried on on a commercial scale, it would require the investment of adequate capital?—A. Yes.

Q. Have efforts been made to interest private capital, do you know, in recent years?—A. I presume it was for that purpose the Peat Committee has been created, to try out the various plants and give the public the information.

By Mr. Keefer:

Q. There have been several attempts by private capital in the past years to develop it. Take, for instance, Fort Frances; they sunk a lot of money there.—A. I have referred to that in my statement.

Q. They also did in Welland?—A. They spent, from what I can find out, approximately a million dollars before 1908.

Q. That was all in an effort to find some way of practically manufacturing, not sundrying it, but simply compressing it and eliminating the moisture?—A. It was all done on the basis of having the peat dried artificially.

Q. You are well posted on that subject, and I would like to get your idea. The result of your experience has been, I believe, that nature's way of drying it—sundrying it—is the only economical way of handling it so far?—A. So far.

Q. There may be some other processes discovered that will be satisfactory?—A. Yes.

Q. But so far it is simply the digging it out, leaving it to sun-dry during the summer, and then marketing it?—A. Yes.

[Mr. A. Anrep.]

Q. That is being done at Alfred?—A. Yes.

Q. What is the cost at Alfred?—A. Four dollars.

Q. The question was asked on the floor of the House, in 1920, what the cost was, and the answer was given that the cost including all overhead charged was three dollars and five cents in 1911. Of course, it would cost a little more now?—A. Well, last year I understand the cost of manufacturing, including the interest and amortization at the plant at Alfred, f.o.b., was four dollars a ton.

Q. Then the difference between that and the selling price would be transportation, handling?—A. Transportation is a dollar and forty-two cents from Alfred to Ottawa.

Q. Then you must allow a reasonable profit for distributing and selling?—A. Yes, they charge two dollars a ton for delivery and the rest for selling.

Q. Now, you have had experience with it, having burned it in your own house, how did you find it for grates?—A. I found it very suitable in my cooking stove. I have used it there the whole winter.

Q. You have used it the whole winter?—A. Yes.

Q. What about the other types of fires?—A. I have used it in the grates and in the furnace.

Q. And the grates were very satisfactory?—A. Very satisfactory.

Q. How about the furnaces?—A. In a furnace you can only use it in March and April—

Q. It is admirably adapted for the early spring and late fall?—A. Yes.

By the Chairman:

Q. Why not in winter?—A. For the simple reason that it takes too much stoking, and our furnaces are not adapted for its use.

My Mr. Keefer:

Q. Mr. Anrep, I have mixed it with a little bit of hard coal, pea coal—and I obtained very good results. Did you ever try this?—A. Yes.

Q. How did you get along?—A. I found it very satisfactory. When the fire was getting low and I wanted a quick fire, I put the peat on the fire and then put the coal on top of that.

Q. Could you burn it in the furnaces at all?—A. How do you mean?

Q. By mixing peat and pea coal in your furnace, would it work out satisfactorily?—A. Yes and no. I do not think it would in very severe weather.

Q. Not in severe weather?—A. No, because it burns too quickly.

Q. Would not the hard coal check it down?—A. The trouble is that the hard coal gets sufficient support from the peat to burn up quickly too.

Q. What is the ratio in heating-power? What would you say of a ton of peat as compared to a ton of either semi-bituminous or anthracite coal?—A. Before the war the best anthracite was equal to 1.8 ton of peat.

Q. Very nearly two tons?—A. Practically two tons.

Q. Two tons less one-fifth?—A. Yes. Well, after a thorough investigation in the mechanical laboratories we have found that the calorific value of the present anthracite is lower, you may say one and a half tons of peat is equal to a ton of coal.

Q. Are you speaking of anthracite coal?—A. Anthracite.

Q. What is the ratio as compared with bituminous coal?—A. Well, bituminous coal has practically the same calorific value as anthracite.

By Mr. Maharg:

Q. As peat?—A. No, as—

Q. Bituminous?—A. No, anthracite, only, of course, it has a quicker combustion and burns out faster.

[Mr. A. Anrep.]

By Mr. Chisholm:

Q. Just one question there: You spoke of dry peat?—A. Yes.

Q. Do you mean dried by the air, or manufactured?—A. It does not make any difference. With peat, it does not make any difference how it is dried; it will have the same calorific value.

Q. You mean to say that you can, with the air of the sun, dry it out just as well as you can with any manufacturing appliance?—A. Artificially?

Q. Yes.—A. Unfortunately, or fortunately—I cannot tell which—up to the present, all artificial plants have fallen absolutely flat, because it was found that in order to dry one ton of peat in most instances it required half a ton of coal.

Q. I was just going to get at that—

By Mr. Hocken:

Q. Do you know a man named Graham in Toronto?—A. Mr. Graham, of Toronto? No, I do not think so.

Q. He has designed some machinery for pressing peat.—A. Artificially pressing?

Q. Yes.—A. No; I have heard of him. We receive a very peculiar thing on our department every year, in as much as we get in fourteen or fifteen—this year twenty-two—patents from various countries, taken out in Canada on squeezing the peat, or at least squeezing water out of peat, and every one of the systems has been tried out on a small scale, but they seem to have all failed.

By Mr. Keefer:

Q. They have not been able so far to improve on nature?—A. It is the gelatinous matter in peat which prevents them from squeezing the water out of it. As you know, peat in its natural state contains from eighty-five to ninety per cent moisture in its natural state. It is like taking a bit of peat in your hands and trying to squeeze it; not a drop of water will come out; all the peat will come through your fingers, just like paste.

Q. But when sun-dried, it is a very satisfactory fuel for the springs and falls, for cooking and for the furnaces and grates?—A. Yes, for these purposes. The Committee has endeavoured to find something that will answer this purpose. There were about five or six people applied, and Mr. Moore has now invented something like a spreading device which looks very promising. They are going to use it this coming summer. They are erecting it in the States. They were not able to get the proper contracts soon enough to erect it here.

By the Chairman:

Q. Will you state the methods you have pursued for manufacturing peat out there—just briefly?—A. The peat is excavated mechanically, and the excavator is placed on a rail and works diagonally. It cuts a trench at about a forty-five degree angle, and for that reason it excavates all the layers simultaneously and you get all the layers of peat, because in some cases the lower layers are more humified and the upper ones less humified. The whole machine rests on caterpillars and moves automatically following the trench. After the peat is excavated, it is thrown into a hopper from which it enters into a pulping machine, and the machine pulps it very thoroughly, and the more it is pulped, the more homogenous it becomes, and through a greater maceration, brings out the gelatinous matter, and when this is spread it comes to the surface and prevents the peat from absorbing more moisture after it has been laid down on the field for 24 hours.

By Mr. Keefer:

Q. And you say water will not affect it?—A. No. As soon as it rains, the gelatinous matter seems to contract, and when the sun comes out the pores open up and

[Mr. A. Anrep.]

evaporation takes places. Then the peat is dumped into dumping cars which are transported by cable on the track system. At a right angle to the excavation, there is a small spreading machine which works independently by a gasoline engine, and spreads the peat in a right angle to the machine, nine hundred feet long, and about eight feet wide. At the end of the spreader knives are placed which divide the rows four and a half to five inches apart, making five-inch rows—from four to five inches thick. After the peat is spread, we have a special drum arrangement with knives on it which rolls over the peat and cuts it in blocks, and that is left there to be dried—this field was three thousand feet by nine hundred, that is the field—and of course it followed the trench for three thousand feet, which takes quite a long time, because it excavates about forty-five feet wide by nine or ten, depending on the depth of the bog.

Q. Per day?—A. No, it only excavates about twenty-five or thirty or forty feet in length a day. After two weeks time the peat is sufficiently dried to turn and cube. It is cubed in small hives which look exactly like bee-hives, which keep the air circulating through. I understand they are getting a process now which will do this automatically, where before it was done by hand. Then you have to test it out to know the moisture. The peat ought to be immediately stored to ship. It should not be left on the field very long, because it is very bad for it. It loses its cohesive properties, but once it is shipped, or even piled up in stacks, or in any way at all to keep it together in large quantities, it will remain there for years in good condition. Then, of course, we have an automatic arrangement for collecting the peat and filling the cars with it and deliveries are done on the ordinary basis.

By Mr. Keefer:

Q. For what distance will it stand transporting?—A. It really does not make the slightest difference how far it goes, sir. It is the loading.

Q. But I mean as regards the cost of transportation?—A. Really, we do not need to know that very much in Canada because we have peat bogs everywhere, every fifty or a hundred miles.

Q. Yes, I know you have bogs everywhere, but are they economical bogs?—A. They are scattered throughout Canada, or at least throughout Ontario and Quebec.

Q. This experimental work done at Alfred was done jointly by the Ontario and the Federal Governments?—A. Yes.

Q. Have any provinces taken up the matter at all?—A. No, sir; they are awaiting the results from this joint work.

Q. Am I right in understanding there are peat bogs in each province which it is economical to develop?—A. No, sir. There are some in Nova Scotia, in Prince Edward Island, the province of Ontario and the province of Quebec; but not in the west.

Q. There are quite a few deposits between Lake Superior and Winnipeg?—A. Yes, sir, but they are not suitable for the manufacture of fuel.

Q. Do you know anything about the English River district. I have heard that spoken of recently?—A. I have not done any work there, but I have heard of it.

Q. You were speaking of the Fort Francis district?—A. Yes, and the Rainy River district.

By Mr. Chisholm:

Q. Do you know anything about the peat bogs in Nova Scotia?—A. Yes.

Q. Where are they located?—A. Well, there are some bogs near Halifax—

Q. Yes, I know that.—A. However, they are not very great. Then there are bogs around Yarmouth and Argyle. Those are the sections which we investigated.

By the Chairman:

Q. What about the Ontario fields? Tell us where the better fields of Ontario are?—A. There is a very good field near Bradford—no, Brantford.

[Mr. A. Anrep.]

Mr. KEEFER: There is a Bradford too.

WITNESS: This is Brantford, B-r-a-n-t—Brantford. Then there is a large bog near Welland.

By Mr. Keefer:

Q. That is between Welland and Port Colborne?—A. Yes. Then there is a bog out here about eight miles from Ottawa.

Q. In which direction?—A. East; toward Caledonia Springs. Then there is a very good bog at Alfred of which we all know.

Q. We do not all know. Where is Alfred?—A. Next to Caledonia Springs; three miles from Caledonia Springs—Alfred, Ontario.

By the Chairman:

Q. Near Dorchester?—A. Yes.

Q. What is the bog there like?—A. Well, they call it the Dorchester Peat Bog. It is a very good one.

Q. I see in your list here you have Dorchester, Ontario?—A. Yes.

Q. That is near London?—A. Yes. Dr. McWilliams has it; it is about four miles from London.

By Mr. Hocken:

Q. Have there not been very vigorous efforts made to develop that bog at Dorchester?—A. Yes, Dr. McWilliams has done a great deal of work, and spent a lot of money lately there.

Q. Has he succeeded in doing anything with it?—A. Unfortunately, no.

By the Chairman:

Q. What about the bog in Perth county?—A. The bog in Perth County is a mile and a half or two miles east of Perth.

Q. You are referring to Perth town?—A. Yes.

Q. But there is a bog in Perth county near Stratford?—A. Yes. We know that too, but I would not recommend that very much. It is too heavily timbered and it is very light.

Q. What about the bogs in Northern Ontario? There are some up there?—A. There are some up near Cochrane and Cobalt. Nellie Lake is a good one; that is up near Cochrane. The rest will be good after a certain amount of drainage has been done.

By Mr. Keefer:

Q. Do I understand, Mr. Anrep, that the chief difficulty in the experimental has been, heretofore, the endeavour to artificially dry it, or compress it?—A. Yes.

Q. Where you have not tried that system and simply depended on sun-drying, you have had no difficulty?—A. No, so far the work done in different places where these large amounts of money have been spent, have been experimenting in the artificial drying of it.

Q. It has been experiments in the artificial ways of doing it?—A. Yes. We really do not need to apply that entirely to Canada, because a lot has been done in the United States and all over Europe.

Q. But simply to go in and pursue the process which you have described, excavating, sun-drying and shipping, has entailed no failures?—A. No failures.

By the Chairman:

Q. A great deal of peat is manufactured in Europe. What is the difference in the conditions between Europe and here that enables it to be manufactured there commercially, while it cannot be in Canada up to the present?—A. Canada has had up

[Mr. A. Anrep.]

to the present the great advantage of receiving coal at reasonable prices from the United States—practically next door; while the Northern European countries had to receive their coal from Wales, and usually the price was very high and prohibitive, and for this reason, for private purposes,—as well as for domestic purposes—peat is manufactured in those countries, and it was found that it was suitable for this kind of purpose, and the people developed it more and more. Then, of course, in Russia, we have the South Donets coal fields. They are situated very far south. In the north, the people were very much dependent for fuel upon either wood or peat. The wood was usually shipped to England as pulp, and so they manufactured peat, and the industry developed to a considerable extent.

Q. They use a great deal of peat in Ireland and Scotland?—A. Yes.

Q. They are very close to the coal fields there.—A. It is usually used by the poorer people because it is cheap.

Q. What about its quality as compared with the quality of Canadian peat?—A. Certain bogs in Canada have the same quality of peat as in Scotland and Ireland.

Q. How do they compare with the Continental European bogs?—A. Very much the same.

Q. So the quality of our peat is all right?—A. It is all right.

By Mr. Keefer:

Q. What about the quantity? How long will it last?—A. That is something that I cannot say, at the present time, because even in the last thirteen years—there is a statement there,—a certain amount was investigated and there are thirty-seven thousand square miles of it.

Q. You gave in that statement your estimate as to the length of time the supply would last?—A. Yes.

By the Chairman:

Q. Do I understand that the Peat Committee is likely to use a machine this year which will solve some of the difficulties of the past? Do you know anything about that?—A. Well, I understand that it is going to be a machine which is going to excavate automatically, transport the peat on the field automatically, collect the peat automatically, and arrange the loading automatically. If they can eliminate all that labour, it certainly ought to go down in price.

Q. And it is likely to work satisfactorily—apart from the cost?—A. Up to the present most of the things worked satisfactorily, and I may say that the Committee has done very good work.

Q. But I mean the machinery?—A. The machinery I mean, but some of the things have not proved satisfactory, and for this reason they are adding something new which they are going to try out, but it is very hard to tell what the result will be.

By Mr. Keefer:

Q. Has there been any experimental work done on peat, as there has in connection with lignite, that is, for the extraction of gas and other by-products which have been found so valuable in lignite?—A. Quite a little.

Q. With what results? I know the results from lignite. How about peat?—A. It has always been found that the erection of these big plants is very expensive, and they were never able to get a proper market for their by-products. They were able to market it all right at the prices stated—

Q. At a reasonable price?—A. At a reasonable price, as they stated, but there was never enough of a market for it, so naturally they failed.

Q. Well, that does not affect us so much, when some of the large sections which you have described are proven quite a feasible proposition.—A. Yes, because some of the bogs contain a high percentage of nitrogen.

[Mr. A. Anrep.]

By Mr. Chisholm:

Q. Peat has been used for a long number of years in both Ireland and Scotland?

—A. Yes. For how many years?

Q. I do not know.—A. Yes, for years and years; centuries ago.

Q. Is it not a fact that they are dispensing with peat now, and buying coal, more than they ever did possibly, at a higher price than they ever did before?—A. I would not say that about Ireland.

Q. What about Scotland?—A. About Scotland, I cannot state very well. I noticed in Scotland when I was travelling around there, that the farmers were still cutting their peat by hand, which is a very expensive process, taking lots of time; and they were still using it in the hearths—the grates. In Ireland I know it has increased instead of decreasing, because they find that for domestic purposes peat is just as good as coal, and even better, because they burn less and they get the efficiency.

Mr. COWAN: Mr. Chairman, there is one point in the evidence given by the witness this morning which is in direct contradiction to the evidence given here the other day by an anthracite man of Ontario.

By Mr. Cowan:

Q. You told us this morning that there was no trouble in inducing the people to use this peat. The other day an anthracite dealer told us that the Ontario people were so aristocratic and high-toned that they could not be induced to substitute bituminous coal for anthracite—A. I might say that the amount of peat manufactured has been very small.

Q. But you have had no trouble in getting people to use it?—A. Not at all.

Q. Why?—A. Well, peat is clean; peat is very attractive. If the women—if your daughter fills the grate with peat, she will not feel that she has dirtied her fingers or her clothing. There is no soot to it. If they are using soft coal there is a feeling against it; it is objectionable because it is too dirty. They use the anthracite coal because it is cleaner. This peat has been manufactured in such a small quantity that we cannot compare it with either the anthracite or bituminous coal on the market.

Q. Do you consider peat superior to soft coal?—A. Yes, for domestic purposes.

By the Chairman:

Q. In what ways?—A. Cleanliness and even in efficiency. Now, for instance, if you use soft coal you have to use kindling. I am speaking now of small houses and not of industrial plants where it is different altogether. You do not use kindling with peat.

By Mr. Cowan:

Q. How do you light it?—A. I take a small piece of peat and put it on a newspaper; I crumple it, all up, put the broken peat on it, and twenty minutes afterwards I have a blazing fire. I have never used any kindling in my house, and I have used peat in the cook-stove for a whole year. Now, we do not use it, because we have electricity.

By Mr. Hocken:

Q. Did you say they used large quantities of peat in northern Europe—Russia?—A. Yes.

Q. Do they try any machinery for artificially making it?—A. None whatever.

Q. It is all sun-dried?—A. All sun-dried; four million tons a year.

Q. Is there any place in the world where they have succeeded in drying it artificially?—A. Unfortunately there is not.

Q. Do they briquette it at all?—A. No. It is all in brick form, about eight or ten inches long, four inches thick and five inches wide.

[Mr. A. Anrep.]

Q. After it is dried, it is pressed that way?—A. No, it is left in the field; formed in the field, practically left in its natural state—wet—and as it dries out, it has sufficient cohesive properties to stick together.

Q. Have you ever sold any in the cities—have you tried to sell any in Toronto?—A. I understand the Committee sold some in Toronto, some in Montreal—

Q. Do you know what price?—A. Some at Ottawa. I know it is four dollars to the b. Alfred. I cannot tell you exactly what the cost of transportation is. I know in Ottawa it costs nine dollars a ton.

Q. And it is worth about three quarters of a ton of coal?—A. Yes.

Q. That would equal coal at twelve dollars a ton?—A. Well, anthracite is sixteen dollars to seventeen dollars and a half, sir.

By the Chairman:

Q. You mentioned in your statement several times this morning peat litter. What do you mean by that?—A. Well, sir, I mean the large manufacturers in Holland, Sweden and Denmark have used peat litter for packing purposes—

Q. What is peat litter?—A. It is peat which is not sufficiently humified, that is, nature has not turned it enough to make it compact enough for the purpose of manufacturing peat.

Q. It is young peat?—A. Yes.

By Mr. Keefer:

Q. What is the difference between muskeg and peat?—A. Muskeg is a shallow bog which is usually flooded, and covered over with aquatic plants and grasses, and is very shallow.

Q. The difference is chiefly one of depth?—A. Yes, because it is a low bog.

The CHAIRMAN: Are there any further questions?

By Mr. McKenzie:

Q. Has this manufacture of peat been undertaken as a private enterprise by any company in Canada of which you know?—A. Not up to the present, sir, for the reason that some people were taking it up just before the war, and when the war broke out, of course, the people did not bother with it, as it was not essential at the time. They did not like to spend money on it, so it was laid aside. Since then the Government has taken it up, and tried to get all possible information upon it.

Q. In producing and selling a ton of peat, do you know if the Government has figured out the investment in regard to it, that is, the capitalization and overhead expenses, and everything that a private enterprise would take into account for producing peat for the purpose of sale? Do you know if they have carefully figured out everything that enters into the product at this time?—A. I think so, sir. I think you can get all that information from the Peat Committee.

Q. And you think that after taking the circumstances incident to it into consideration, that it could be sold commercially for nine dollars a ton?—A. I think so, sir, but I am not positive. There is no reason why it should not.

By Mr. Keefer:

Q. As it goes further in the way of progress and larger quantities are handled the price ought to come down?—A. It ought to come down because the manufacturing of the machines will be cheaper.

By the Chairman:

Q. About what capital is required to establish a plant of fifty tons a day?—A. Fifty or sixty tons a day. I would presume to-day it means about \$60,000 to \$75,000. That would be manufacturing 75 tons a day.

[Mr. A. Anrep.]

By Mr. Keefer:

Q. Just one question. When you have taken off the bog off the land of course the land that is left in the hole is practically useless. It becomes a lake. You could not figure on the value of the land being worth anything?—A. I must say that it would be very fine and suitable land for agricultural purposes. For this purpose the machine does not excavate right into the clay. It leaves several inches above the clay.

Q. It is just a question of drainage?—A. Just a question of drainage. Usually it drains immediately right away. In Alfred there is a canal. You can see about sixty feet—that should be 200 feet wide and about 300 or 400 feet long, and the bottom is practically drained.

By Mr. Maharg:

Q. Are the bogs in this country as deep as they are in Ireland?—A. No, we never strike bogs as deep as in Ireland. Of course there are some, in Ireland fifty or fifty-two feet deep. The deepest struck was at Rivière du Loup, Quebec, thirty feet deep.

Q. In some bogs in Ireland at the bottom they are almost equal to coal, when they get it dry?—A. Yes.

Q. You have not found that here?—A. No.

Q. That may account for increase in use in Ireland?—A. True, but in the Old Country they cut it by hand and we macerate it, and through maceration it gets better fuel, so I think by using machinery in Canada and their cutting by hand would stand on an equal basis.

Q. In cutting by machinery you get moisture off the bottom and the top?—A. Yes, and the hand-cut peat is very light, very porous. Of course the bottom, as you say, is very good, and as you get to the top it is very light.

By Mr. Hocken:

Q. I was talking to Mr. Daly who was here the other day after he left the Committee, and he stated to me if you pile a big stack of peat and the peat got moist it would absorb the water. Did you ever see that?—A. No.

MR. KEEFER: Mr. Hocken, I am using peat all winter and I am using it now, so that denies that statement.

MR. HOCKEN: It does not absorb the moisture from the atmosphere?

MR. KEEFER: No.

By Mr. McKenzie:

Q. Just one word more about the use of it in Scotland, Ireland and England, if they do use it in England. The climate is very much milder in Scotland and Ireland than the Canadian climate. The winter is milder?—A. Yes, sir.

Q. How would peat do in this intensely cold climate, say Manitoba, or even Ontario, when we have it twenty-five or thirty below? How does it compare—how does that fuel do for heating purposes in climatic conditions of that kind?—A. With our present arrangement in furnaces, and private dwellings, in large houses, I don't think it is very suitable, but for smaller dwellings, farm houses and generally speaking, in keeping extra comfort in the house, like grates and cooking stoves, it is very satisfactory.

Q. How does it compare with wood?—A. If you put it in the form of ton to ton—of course a cord to the ton, it will not do. It would take about a ton and a half of wood to equal one ton of peat.

By Mr. Keefer:

Q. Half way between coal and wood?—A. Yes.

By the Chairman:

Q. What kind of wood do you mean?—A. I mean birch, maple, hardwood, elm.

[Mr. A. Anrep.]

Q. A ton and a half of wood to a ton of peat?—A. Yes.

Q. We buy our wood at about \$6 a cord?—A. You could not do. It could not be compared at all. Wood is out of the question altogether, because I understand good hardwood is \$20 a cord.

By Mr. Keefer:

Q. Shall we go on with another witness?

The CHAIRMAN: Are you through, Mr. McKenzie? Any other questions to ask the witness? Thank you for your attendance. You are discharged. We have no further witnesses.

Mr. KEEFER: There is another gentleman here on charcoal if you want to take him.

The CHAIRMAN: Coke. We have witnesses on coke, whom we have written to and invited.

Mr. MAHARG: You have a place for them on your programme later on. That is you expect them later in the week.

The CHAIRMAN: To-morrow we have electricity, Mr. Murphy, of the Railways Department, and I wrote Mr. Fairbairn, of the Canadian Pacific Railway. I have not heard from him yet as to whether he will come or not. Mr. Murphy will be here. Then on Wednesday we had set down for the consideration of coke, and you remember the Committee decided to summon the auditors of the coal company, so that of course knocks out our entire programme, and in addition to that Mr. Lucas, whom we have asked to come, and who had promised to come. He wired me Friday night that he had a meeting to attend and he would not be here before Saturday.

Mr. KEEFER: Who is Mr. Lucas?

The CHAIRMAN: He is the coke expert of the Dominion Coal Company. His name was mentioned in the early sessions of the Committee. On Thursday we have asked the Chairman and the Chemical Engineer of the Lignite Utilization Board to attend. On Friday we have the Conservation of Fuel. Probably Mr. A. V. White of the Commission of Conservation will be here. Now that shuts out the consideration of coke unless we set another day apart for it.

Mr. KEEFER: It is as well to take it by itself.

The CHAIRMAN: We could not do that before Monday if we follow this programme. Mr. Lucas could not be here before Monday. Why don't we call him on Saturday?

Mr. COWAN: The House sits on Saturday. I think we ought to crowd in everything we can possibly do this week, put in our evidence and clear it up and get our report into the House.

The CHAIRMAN: Is it the desire of the Committee we should endeavour to close up this week. If so we can get Mr. Lucas on Saturday. Then we could finish with the programme so far as we have outlined.

Mr. CHISHOLM: You mean to close down this week?

The CHAIRMAN: Yes.

Mr. CHISHOLM: What about the witness we moved for the other day?

The CLERK OF THE COMMITTEE: He has not been called.

Mr. MCKENZIE: What list of witnesses have you now? Have you a list of witnesses yet to be called?

The CHAIRMAN: I have just given them. On Electricity we have Mr. Murphy, and Mr. Fairbairn. I am not sure if Mr. Fairbairn is coming. I have not heard in reply to my letter. Then on Wednesday, if the auditors are here—they have been summoned to appear on Wednesday. I presume they will take up all Wednesday. On Thursday, we have Mr. Ross, the Chairman of the Lignite Utilization Board, and Mr.

[Mr. A. Anrep.]

Stansfield, the Chemical Engineer of the Lignite Utilization Board. On Friday the Conservation of Fuel by Mr. Arthur White. Then we have Mr. Lucas, and it is intended to call Mr. Dionne of the Ottawa Gas Company, also to give evidence on coke. As I said, we had arranged that for Wednesday, but on account of the Committee deciding to call the auditors that day we could not hear both in one day.

Mr. McKENZIE: Is Mr. Lucas an expert on the manufacture of coke and its by-products?

The CHAIRMAN: Yes, I understand so. That is the information. He is in charge I think of the coke end of the Dominion Coal Company's operations, and is also associated with the Fuel Controller's office here as an expert on coke.

Mr. McKENZIE: In connection with coke, it would be important for us to get the evidence of an expert on the manufacture of coke, particularly with a view to ascertaining the by-products of bituminous coal obtained in the manufacture of coke and the commercial value of the different constituents which are obtainable out of coal in the process of coking, because you may be able to get very cheap coke if you conserve all the other ingredients that are in bituminous coal. The coke part of it may be very cheap; on the other hand if you use the coal with no results from it but the coke, your coke is going to be dear.

The CHAIRMAN: Do you know if they save the by-products down in Sydney?

Mr. McKENZIE: Oh, yes, they do.

The CHAIRMAN: Mr. Lucas, I understand, is the man in charge of that department of their work, I don't know anything about him.

Mr. McKENZIE: I don't say they save all the by-products, but they save some of the by-products.

The CHAIRMAN: Will that be satisfactory then?

Mr. McKENZIE: There must be some man in connection with the department here, the Mines Department, who should have a theoretical knowledge and a scientific knowledge of the production of coke, I fancy. Perhaps we could find out. I am not at all aware that this man Lucas is anything more than a man who can make coke, or who superintends the coke ovens. He may be something better than that, but, of course, that is a big job for anybody because they produce large quantities of coke, and there are hundreds and perhaps thousands of coke ovens, and the man that looks after that has a lot to do, but whether he has a scientific knowledge of the results that will obtain when you are coking coal, I don't know. Perhaps he might.

The CHAIRMAN: Well, he seems to be a recognized authority, because I know he writes articles on it.

Mr. McKENZIE: I think we can find out if we have a scientific man in connection with the department to tell us the different constituent elements we get out of a ton of bituminous coal and their respective value. That would be important to get.

The CHAIRMAN: Sometimes we get only the scientific side without the practical side, Mr. McKenzie.

Mr. CHISHOLM: That just points out the necessity in selecting these witnesses of consulting somebody on that particular feature now. Mr. Lucas, of course, might be a good man. I don't know anything about him. But it is very important to have a man who knows the practical as well as the scientific side, and we should give consideration to the selection of those men.

Mr. McKENZIE: I don't know that I am making myself clear. What I mean by scientific men is a man who is a practical scientific man, that is, a man who can do the work himself—ascertain the different substances and commodities that you can get out of a ton of coal and their value after you have ascertained what other elements, including the tar, gas, ammonia and all the different materials you get out of a ton of coal, what they are and what they are worth in the commercial world.

[Mr. A. Anrep.]

That is what I would like to know, because I think there is a field for the production of coal in this country, and if you can get it fairly cheap it is something to consider.

The CHAIRMAN: Mr. Hudson informs me that Mr. Stansfield of the Lignite Utilization Board would be able to give information along these lines if the Committee would wish.

Mr. McKENZIE: Are you satisfied it is necessary for us to have that information? Because we want to know what we can get out of a ton of coal, or for what price we would be able to sell all the coke we would get out of it.

The CHAIRMAN: I am assuming Mr. Lucas is in charge of all the coke operations of the Dominion Coal Company. I would assume he would be very familiar with the commercial side as well as the scientific side.

Mr. McKENZIE: He will certainly be familiar with the question of coke, but whether he is familiar with how to conserve and obtain the by-products I am not so clear.

The CHAIRMAN: He would need to be. If they are producing it they are saving the by-products.

Mr. McKENZIE: There are some works in Sydney; they call them Tar Chemical Works.

The CHAIRMAN: However, it is in the hands of the Committee. We acted on the instruction of the Committee previously in asking Mr. Lucas to attend. But does the Committee wish any other arrangement?

Mr. COWAN: Bring him and then we will find out what we need. That would be the last day though.

The CHAIRMAN: He cannot be here before Saturday.

Mr. COWAN: I think you will find that the officer this Lignite Utilization Board would send would be able to give all the information Mr. McKenzie wants. They come on Thursday. You will find it will be very, very satisfactory. That is one reason I have been asking all along that they be brought here because I am satisfied they can give you all the information.

Mr. KEEFER: I was going to ask the Chairman to give us a day to call some people on the question of transportation of this fuel. I think it is important that we get the cost at the mine or the bog or whatever it is, and we can get the consumer's price, and we want the intermediate conditions.

Mr. CHISHOLM: I move that labour representatives from Inverness be called for Friday or Saturday next.

Motion agreed to.

The CHAIRMAN: Is there anything further? Are there any other witnesses. Let us decide now on a day on which to call the witnesses we may require and then there will be no more after that.

The Committee adjourned until Tuesday, May 10, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

MAY 10th, 1921.

The Special Committee appointed to enquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: We have two witnesses to-day to discuss electrification with the committee. Mr. Fairbairn of the Canadian Pacific Railway, and Mr. Murphy, of the Department of Railways and Canals. We will call Mr. Fairbairn.

JOHN ROGER FAIRBAIRN, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. Chief engineer of the Canadian Pacific Railway.

Q. Electrical engineer?—A. No.

Q. How long have you held that position?—A. A little over three years.

Q. And what positions did you hold before that?—A. I think I held nearly every position in the engineering department, from the bottom up.

Q. You have been employed by the C.P.R. during that time?—A. Yes.

Q. Have you a statement prepared that you wish to present to the committee?—A. No, I just came expecting to be questioned.

Q. The committee is anxious to get some information as to the possibility and the commercial feasibility of electrifying some of our railways. Has the C.P.R. electrified any of their lines?—A. None.

Q. I presume they have given it consideration?—A. Yes, they have.

Q. And have reached certain conclusion in the matter?—A. Well, on any particular section that has yet been considered we have never been able to show that we could electrify at a profit—that it would pay us to electrify so far.

Q. Could you state to the committee why you reached that conclusion, on what your decision was based briefly?—A. Well, there are a great many factors entering into a consideration of that kind. To begin with, the density of traffic on any particular section of road is probably the most important factor in determining the feasibility of electrification; coupled with that you have the physical characteristics of the line as to grade and fall, etc. Your power I think is admittedly more efficient when delivered, when the road is used electrically than when it is used directly by coal in a coal-burning locomotive, but that greater efficiency is more than off-set on any of our lines that we have investigated by the sparseness of the traffic and the cost of electricity delivered to that particular section. When you are considering any special mileage of road you have to consider not only the traffic—that is the density of traffic—and the physical characteristics of the line, but the availability and the liability of your power supply, and where the power supply is available for commercial purposes and the railway can purchase what it wants you have probably the most ideal conditions, but when a railway has to manufacture its own power in order to take care of its own requirements only, and there is no commercial outlet for the balance of the power that they cannot use, then it becomes a very expensive proposition. I had occasion a short time ago to go into the question on one of our sections, and one of the conclusions that I came to about it was this; the art of electrification while not in any sense experimental as far as its practicability is concerned, is as yet in the development stage, and it is very much better for a railway like the Canadian Pacific, through a sparsely peopled country

like Canada, to allow the development to go ahead. In a country like the United States, where they are developing electrical operations through their thickly populated territory, where power has been developed for commercial purposes, and can be obtained from a number of sources, thereby increasing its reliability—let them develop; they have much more density of traffic, they have much better power supply, as far as already developed power is concerned. Why should we not let them develop, and when they come to what you might call standard methods of electrification, then it is surely time enough for us to take up the problem as it becomes more economically feasible over here. We have not been able to find any point on the line yet where it would pay us to-day to electrify.

Q. One reason that might be advanced against that process is the fact that in Ontario at least we are without coal, and coal has to be transported a long distance especially if we had to depend on Canadian coal for the operation of our railways?—A. True.

Q. Even in Ontario the company would not be warranted in using electricity instead of coal?—A. No, I do not think they would as yet. I do not think there is sufficient density of traffic on any of our lines to justify it.

Q. Why would a density of traffic be required for electricity any more than for coal?—A. Because for electricity you have to have a power supply capable of handling your maximum traffic, your peak load in other words, whereas with a direct use of coal-burning locomotives, your coal is consumed in direct proportion to the amount of traffic handled.

By Mr. Cowan:

Q. Is that not available in certain portions of Southwestern Ontario now, without developing it yourself?—A. Which?

Q. Electrical power?—A. Yes.

Q. Could not be supplied there for you?—A. Yes. I might say we have some electrical lines in Ontario. They are not steam lines that have been electrified at all, but they started with the acquisition of a small electric line as a feeder, and that electric line serves certain municipalities, and that was extended a short time ago, or other lines acquired and joined up with it. We have even there with the light traffic that exists—when I say light traffic I mean light as compared with our main line, as compared to units and power consumption—we have even there very great difficulty in our power supply as yet from the available source.

Q. Difficulty of what nature?—A. Difficulty in getting from the hydro the amount of power that is required.

By the Chairman:

Q. How does the cost of operation of this line with electricity compare with the cost of operation by coal on similar lines?—A. Those lines are really inter-urban lines, and you cannot compare them with a steam operated line of a main road operation handling heavy traffic. We handle a certain amount of freight, but we run mainly a passenger business.

By Mr. Cowan:

Q. We were told the other day that the most dense traffic in Canada was between Smiths Falls and Montreal. Supposing an attempt were made to electrify that line, how would you develop your electricity there? Through the use of coal, or would you be able to find water-power sufficient to develop it in that area?—A. I should think there the first place to look for power would be to the power companies that are already operating, the Cedars or something like that, compare the price they would ask with what we could develop our power at by either a development of our own in the vicinity or by use of coal.

[Mr. J. M. R. Fairbairn.]

Q. Supposing you were going to do that between Smiths Falls and Montreal, have you any idea what the capital cost would be as the investment?—A. No.

Q. That is doing it yourself I mean?—A. I could not give you that off hand at all, but I might say this in regard to Smiths Falls, that there again you come into the difficulty of a very low grade line, where a steam locomotive can haul much more than it can on a line with heavy grades like a mountain sub-division, and still the density of traffic is much greater there than on any of our mountain sub-divisions. At the same time the physical characteristics of the mountain sub-division would, I think, in all probability make the desirability of electrifying that come before the electrifying of the Smiths Falls sub-division, even though the traffic is of much greater density between Montreal and Smiths Falls; but the physical characteristics of the land work the other way, as they require greater density than would be required on a heavy grade line like the mountain sub-division to make electrification desirable.

By Mr. McKenzie:

Q. How does the application of electrical power compare with steam power on difficult grades—heavy grades?—A. There are certain disadvantages in it—very considerable disadvantages.

Q. Do you think electricity is preferable in heavy grades and heavy curves?—A. Oh, yes.

Q. And heavy trains?—A. Yes, where you can justify it financially it is a very much nicer operation.

By Mr. Cowan:

Q. Are there many roads in the United States electrified now?—A. I have here a list of them. But the principal electrifications in the United States—those that are really large propositions—are the two electrifications of the Pennsylvania, that of the New York Central, that of the Norfolk and Western, and the Chicago, Milwaukee and St. Paul, which I think is the largest of all.

Q. Of the Erie a considerable portion is electrified too?—A. I do not know to what extent the Erie is electrified.

By Mr. Keefer:

Q. The Chicago and Milwaukee was the pioneer in electrification, was it not?—A. Yes, it is the pioneer of mountain electrification.

Q. Was that due to the cheaper cost of electricity and the difficulty of getting fuel?—A. I am not able to speak authoritatively as to what was their basis reason for electrification, but the general impression about it is that there was a great deal of power developed in that locality.

Q. Hydro-electric power?—A. Hydro-electric power for mining purposes. There were a number of power houses which were much cheaper than having one, and I think some financial interests and a power company were also interested in the Milwaukee line, or were sufficiently influential or close to it to persuade the Milwaukee people to go ahead and electrify.

Q. In the electrification of a road, where is the greater capital cost? Is it in the establishment of power plants or in the road-bed, the rolling stock and engines?—A. I could hardly answer that off-hand.

Q. Approximately?—A. I think you would probably get the relationship between the power plant cost and the line equipment much better from Mr. Murphy than from me; he is more familiar with that phase of it.

Q. I thought you might happen to know?—A. I could not tell you off-hand, the power plants vary so tremendously.

Q. In the Milwaukee system it was largely because of the establishment of power plants?—A. I understand so.

[Mr. J. M. R. Fairbairn.]

Q. Would that be any factor in Ontario particularly? For instance, take the power which we have along the banks of the St. Lawrence from the rapids, and all our mountain areas practically, running from Old Ontario down to Quebec and Ottawa, would not that be an important factor in electrification?—A. Yes.

Q. And would help to solve it considerably?—A. I think it would.

Q. We had the power right there to generate?—A. Yes.

Q. Then it would come back to the transmission of that power and to equipment?—A. Yes.

Q. You do not think it would be nearly as important a factor as the establishment of the power?—A. I should say this, that given the established power along the St. Lawrence, then it becomes entirely a question of the economics of electrifying those particular lines which, as I said a few minutes ago, are low grade lines, and because they are low grade lines they must have a considerably greater density of traffic to make hydro-electric economical than on a grade line such as a mountain sub-division.

Q. There is nothing in the factor sometimes referred to that electric railways are only economical on heavy grades? That is not a factor at all is it?—A. Just speaking generally, I think it is admitted by electrical economists or engineers that the heavy grade division or section of a railway can be economically electrified on a lesser density of traffic than can a low grade division.

Q. It is more the density of traffic, plus the grade?—A. Yes, plus the grade.

Q. Now coming to the situation here, where we have water powers all around us, have you on behalf of your railway ever done any estimating as to what would be the cost of electrification, and that sort of thing?—A. Well no, we have not gone into the thing to a fine point.

Q. But you have given it general consideration?—A. Yes, we have given it general consideration and carried it sufficiently far to see that there was no use in making detailed investigation as yet.

Q. Why?—A. Because it was not economical, and there was no need to carry it out.

Q. At what stage was it not considered economical? Was that prior to the war?—A. Two or three years ago, we were considering it, but we were considering it on pre-war prices.

Q. Had you arrived at the point where the price of coal would be a factor, as to whether it would or would not be economic?—A. Coal of course comes into the consideration always, because we are burning coal now. But I do not think we considered the question of the coal-burning supply for electrifying as against hydro.

Q. Had you carried it to the point where you considered whether it would be preferable financially to abandon coal burning for electricity, so far as the price of coal is concerned?—A. No.

Q. You do not know what that price would be?—A. No.

Q. Mr. Murphy is well versed on these things, but from a railway point of view you might be able to give us some further information. Have you any data as to the result of the electrification of the Milwaukee road?—A. Yes.

Q. What is the result, can you roughly tell us?—A. Roughly, I would say this about the Milwaukee, that the impression I have gathered from the data I have received and the published story of that road, is that it is a very excellent operating proposition, but I do not think it has been, financially, particularly successful as yet.

Q. Will you explain that in a little more detail? It is excellent from the point of view of convenience and that sort of thing, but financially it is not successful? What do you mean by that?—A. I mean—I have never seen the figures to show that they have made any considerable operating saving on their shift to electricity. I do not understand that they have ever made it a paying proposition to have it electrified.

[Mr. J. M. R. Fairbairn.]

Q. So far as the supply of coal is concerned, supposing they were not electrified?
—A. Well, they have a pretty long haul of their coal.

Q. You formerly used oil in the mountains?—A. Yes.

Q. And you have now abandoned that?—A. Yes.

Q. And you are using coal?—A. Yes.

Q. Have you had any opportunities of considering the mountain section of your road as regards electrification?—A. I have had studies going on there for some time, but we have not been able to show economics as yet.

Q. If we are going to have electrification, I suppose the most practicable place to consider it would be between Montreal and Ottawa say, with all the power lying alongside?—A. I would not like to say yes offhand, because it is a question in my mind as yet whether that section or the mountain section will work out best as an economic proposition.

Q. I suppose you have plenty of coal in the mountain section?—A. Yes.

Q. You have better facilities there in getting coal than you have here in Ontario?—A. Yes.

Q. And you think it would be practicable to electrify the mountain section in preference to the section here?—A. Yes, because of the heavy grades.

Q. It is the grade factor that comes in there?—A. That comes in there to make it economical.

Q. How does the Milwaukee road compare with your system as to density of traffic?—A. I think they have a little more density of traffic than we have.

Q. As a matter of fact if electrification be deemed advisable hereafter, we have in Canada a long line of water-powers. Take along your line, the section that you spoke of, from Montreal, and I would not be surprised if it extended even from the Maritime Provinces; at all events from Montreal to the boundary of Manitoba, we have continuous ability to get power.—A. I think so.

Q. Where would you get it again? In the mountains?—A. Yes.

Q. Are there any in the prairies?—A. I do not know of any except some proposed development at Lac de Bonnet near Winnipeg.

Q. In the northern part of New Ontario, where we have no coal, we have plenty of the white coal.—A. We have.

Q. It is a question of economics and engineering?—A. Exactly.

Q. We have got the goods, and the only question is can we apply them?—A. Exactly.

By Mr. Cowan:

Q. From the standpoint of the travelling public, which is the better, the electrical or the steam-managed road?—A. I do not really know. I would not like to say. I have never looked at it from that point of view, but in electrification there is of course no dust or smoke and that sort of thing. I would not like to say as to the safety of the public if there are large distances.

By Mr. Keefer:

Q. It is much more convenient for passengers?—A. No doubt about that.

Q. You said that you did not think the Milwaukee people had made money; do you know whether they lost money on it?—A. Well, if they did not make it—

Q. They might not have made money and yet not lost any.—A. I doubt if it would be exactly that. There is the other question—I do not know the facts—but if the discussion which is going on about it can be accepted, the same people are getting much out of the power.

Q. You do not know the conditions under which they are supplied? The mining companies may be off-shoots of the railway, and may be pulling down handsome profits.—A. Quite so.

[Mr. J. M. R. Fairbairn.]

By Mr. McKenzie:

Q. If you were running your line across the continent, say from Montreal to Vancouver—I mean the main line—by electricity how close together would you have your power stations?—A. Well, I am really not in a position to give you that. Mr. McKenzie. Mr. Murphy could give you it much better than I can. It would depend considerably on the system that you use. I think I am correct in saying that. There are a number of systems of electrification.

By Mr. Cowan:

Q. How far can you transmit electricity successfully and economically?—A. That again depends on what it costs you to develop it, and on how you are using it.

By Mr. Keefer:

Q. In regard to the American systems, the Norfolk, the New York Central, etc. do you know why they turned to electricity? We know that in New York city they have practically abandoned the steam railway.—A. It was largely determined or at all events it was precipitated by the disaster in the tunnel approaching Park avenue when the gas was so bad that a number of people were asphyxiated. I think that fact was the immediate cause.

Q. There is another system in the Central part of the States. You spoke of the Norfolk, what about the Hartford?—A. They operate right out to New Haven.

Q. For how long a distance?—A. 73 miles I think.

Q. From where to where?—A. From New York to New Haven.

Q. Now there must be authentic data on that point?—A. Yes, I expect so.

Q. As an engineer you ought to be able to get the information in regard to it, to see what the results are?—A. I can say there is. I have not anything with me at the moment.

Q. They have been electrified for some time?—A. Yes.

Q. Do you know how long?—A. Well, since 1907. They began in 1907.

Q. Something like fifteen years?—A. Yes.

Q. I suppose you cannot give us any more information about that at present, can you?—A. No, I could not give you anything on that at all.

Q. You have nothing before you in regard to the Hartford system?—A. No, but the price of installation—that is all.

Q. You mean scientific particulars?—A. Yes.

Q. We are not concerned about that. (No answer).

By Mr. Chisholm:

Q. After all said and done, is not the cost of producing power one of the leading essentials?—A. Oh, yes.

Q. You must not only know everything about the application of the power, but you must know everything about the cost of production of power?—A. Yes. You must know the various plants from place and everything, to find out the cost of installation.

By Mr. Keefer:

Q. The Hartford installation is coke?—A. Yes. I think I may say generally that all the big systems in the United States are generated with coke, with the single exception of Milwaukee.

By Mr. McKenzie:

Q. Perhaps you could tell me, how do we stand in regard to accidents?—Are we more liable to have accidents with steam power than with electricity? I notice that sometimes in a city we are in the dark. For instance, something happens to the electric system in a building, perhaps in a church, and at the end of the service they are thrown into darkness. Something goes wrong. How do you provide against

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accidents of that kind in running a train with electricity, or would you be likely to have that at all?—A. I think that is entirely a question of the dependability of the source of supply. If you have enough sources that you are drawing from, one concern going out of business would not interfere with you to the same extent as it would if you were depending entirely upon one concern in any given mileage of track.

Q. I had more in mind the conducting of power from the source of supply to the point of operation where it was doing its work. If anything happened that would cut off your power for instance, would you be liable to have any accidents of that kind?—A. It would stop your operation.

Mr. KEEFER: You may have a collision.

Mr. McKENZIE: I am not talking about that.

WITNESS: I think you are apt to have those accidents, of course, bound to have them, particularly in a mountainous country where you get slides which would come down and interfere with your transmission lines, and so forth.

By Mr. Cowan:

Q. It would interfere with your locomotive just the same?—A. The difference between steam and electricity in that respect is that where your transmission line is broken by electricity you put out of business a certain number of units that are operating, whereas with steam, if you have a breakdown it is one locomotive; I mean the steam locomotive operation.

By Mr. McKenzie:

Q. You have more direct control of your power when you have locomotives in the ordinary running with coal, and producing power as you go along?—A. Yes.

Q. Will you explain to the committee how this power is applied in the case of an ordinary train?—I quite understand how it is applied to ordinary trains, but how is the power of electricity applied to railway trains?—A. Well, it is through a locomotive in very much the same way as to a tram-car. They either use a third rail or a trolley wire for contact with the locomotive.

Q. Do they use this overhead wire?—A. Yes. The New York Central operates on a third rail basis. The Milwaukee is operated on a trolley; so is the New Haven, and the Norfolk and Western I think is a trolley also.

By Mr. Keefer:

Q. The Niagara and St. Catharines road, which operates freight trains up the Niagara escarpment, has been in operation electrically in Canada how long? It does quite a freight car business as well as passenger?—A. I have not any record of it, and I am not familiar with when they began operations.

By Mr. Cowan:

Q. Have you made any survey of the water power tributary to your lines of Railway in Ontario to find out whether or not you would be able to develop enough power yourself to satisfy you, to meet your needs or requirements?—A. We have had some investigation along that line.

By Mr. Keefer:

Q. Do you happen to know the quantity of power you would require in horsepower to operate your system between Toronto and Montreal?—A. No, I do not know. I could not tell you that right off.

By Mr. Chisholm:

Q. Is there a line in British Columbia operated by electric power? I do not know if it is your line or in conjunction with your line?—A. No, I do not think so.

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By Mr. Cowan:

Q. The Connaught tunnel is electrified is it not?—No.

By Mr. Keefer:

Q. There is a road that runs down into the States?—A. That is the B.C. Electric.

Q. What distance is that?—A. I do not know what distance, but the B.C. Electric is an inter-urban line.

Q. It is quite a long line?—A. Yes.

By Mr. Cowan:

Q. Take a line from Toronto to Guelph. It must be fifty miles, is it not?—A. About that.

By Mr. Keefer:

Q. We have a line in Ontario that has now been converted from steam to electricity at Port Stanley?—A. Yes.

Q. Operated successfully, according to the returns?—A. Yes. The Port Stanley was more or less of a picnic line, no freight.

Q. But it does a lot of freight business from the Lehigh Valley?—A. I did not know that.

By the Chairman:

Q. Can they use any substitute for coal in producing power?—A. I think there is a certain amount of briquetted coal used from Bankhead or one of those lines along the main line. I think they use a certain amount of that out there, mixed with the other coal.

Q. Do you know the results?—A. No, I could not give you the results.

Q. I understood you to say you did not use any oil now in your locomotives?—A. The oil has been entirely eliminated.

By Mr. Cowan:

Q. Why was that done?—A. There was difficulty in securing the supply.

By the Chairman:

Q. Did you get satisfactory results from the oil?—A. I think so.

Q. Financially and otherwise?—A. I think so—very satisfactory.

By Mr. McKenzie:

Q. How long since your company began to consider the advisability of using electricity in connection with your road?—A. Oh, I think it has been under discussion to my knowledge for the last ten or twelve years from time to time.

Q. Can you say that the idea has made very great progress towards practical results?—A. I would say about this, Mr. McKenzie, that it is governed purely by the economics, and we go into it from time to time to see whether it is becoming a paying proposition, and when it is found it is not, it is dropped.

By Mr. Keefer:

Q. The price of coal is a factor in those economics?—A. The price of coal in the mountain subdivisions has not varied to such an extent.

Q. But in Ontario and so forth?—A. Yes, it is a greater factor there.

By Mr. McKenzie:

Q. This committee is trying to reach some conclusion as to the supply of fuel both domestic and commercial, which would include railway power as well. Do you think that the feasibility of the application of electricity to the operation of railways

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particularly and to domestic heating is a factor for us to consider, or whether anything is to be expected from it in the next ten years that would change present conditions?—A. I doubt it.

Q. You understand my question?—A. I think so.

Q. We are looking for a supply. If we get electricity we require less coal. If we do not get anything from electricity or from any other source we must try and get coal. What I want to know from you is, do you think we can let up on our ideas to some extent because electricity is coming in? In the next ten years could we look for any particular results in that direction?—A. I do not think so, not within that period of time.

By Mr. Keefer:

A. A moment ago I was asking about power-houses being the factor. Supposing there was quite a development of power on the St. Lawrence river in the middle of your system, would that not be a great factor?—A. Yes. If there were power-houses along the St. Lawrence and the people have power to dispose of at reasonable rates, we would immediately consider the proposition to see whether it would be feasible or not.

Q. It would then become immediately a subject matter for consideration which does not exist to-day?—A. Yes.

Q. So that the improvement of the St. Lawrence from the point of view of development of power is a factor on this question, and an important factor?—A. Yes.

Witness discharged.

JOHN MURPHY: Called, sworn and examined.

By the Chairman:

Q. What is your position?—A. My title is electrical engineer of the Department of Railways and Canals, and of the Board of Railway Commissioners for Canada.

Q. How long have you held that position?—A. Since 1906.

Q. What connection had you with these organizations prior to that?—A. None, sir.

Q. What was your position before that?—A. I was connected continuously from the year 1885, almost immediately after graduating from the college at Ottawa, with the development of the hydro-electric industry which did not exist at all under that name at that time. I was in at its birth and have been connected with it ever since. At the time I graduated from college, it may interest the members of the committee to know, although there were 100,000 horse-power within a mile of the Parliament buildings, and the Parliament buildings only needed about 50 horse-power for the electric lighting of the House of Commons, Senate and Library, there were no economical means of transmitting that 50 horse-power over the intervening mile. Consequently, I have been connected with the hydro-electric power business from its start.

By the Chairman:

Q. I think you are prepared to make a statement to the committee.—A. Your note, Mr. Chairman, requested me to make a statement in connection with railway electrification, and also in connection with any other uses of electricity which might result in the economical use of fuel. With your permission, I shall say something about railway electrification in general, something about power developed from coal and something about electric heating. What I have to say in connection with electric heating will show that electricity should not as a rule be put to such a use. The committee will probably appreciate my last remark better if I mention the fact that

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during the war, in Italy, it was a criminal offence to *sell* an electric heater. It was also a criminal offence to use electricity for heating anything between the hours of 4 p.m. and 10 p.m. In other words, the Italian authorities appreciate what a misuse of electric energy it is to *heat* with it.

In connection with railway electrification, perhaps the most amazing spectacle that was ever staged was the one set up at Erie, Pennsylvania, on the 7th November, 1919. The General Electric Company manufacture electric locomotives and other electrical and mechanical apparatus at their shops at Erie. They had at that date one of the 3,600 h.p. electric locomotives for the Chicago, Milwaukee and St. Paul railway ready for operation, and they staged what they called a tug-of-war between this electric locomotive and two of the largest steam engines available. They started off with a tug-of-war between one of the steam locomotives and an electric engine, but the tug-of-war was such a one-sided affair, in the preliminary test, that they then secured a second steam locomotive. The steam locomotives were in one case the largest passenger engine on the Lake Shore division of the New York Central and in the second case the largest steam freight locomotive available. It was first intended to couple these three engines together, to try to start the electric locomotive off in one direction, and, the two steam locomotives in the other direction; but it was soon discovered that there was so much power in those monster engines that they would pull the drawbars to pieces. They then reversed the idea, and had a pushing contest. A signal to start the three locomotives was given; the steam engineers opened their throttles, and the electric motorman turned on his controller; the steam engines were pushed back along the track as if they were not using steam at all. The steam locomotive engineers protested—claiming that it was not a fair test. They pointed out that a steam engine was at a great disadvantage while standing still while the electric motors could make use of all their available power while standing just as well as while running. In consequence of this protest, the steam locomotive men were allowed to get up a considerable amount of speed,—pushing the electric locomotive down the track. With the three engines so running in one direction, the electric motorman turned on his power with his controller in the reverse position; the two monster steam locomotives with their throttles wide open were brought to a stop and then pushed back as though they were a couple of freight cars! A further test was made. The track upon which those tests were made was six miles long. It parallels the Lake Shore division of the New York Central Railroad along Lake Erie. The three engines coupled together went west on the track about three miles. The three of them, all using power, in the same direction, now returning eastwardly attained a speed of nearly fifty miles an hour. The electric engine was receiving power from the steam power plant which operates the manufacturing works at Erie, and the steam locomotives were of course using their own power. Travelling at a speed of fifty miles an hour, the electric motorman then turned off his power and his locomotive was coasted or pushed along by the two steam engines. While running at that speed, the motorman reversed his controller, that is, he used his electric energy in opposition to the power of the steam locomotives, and, in a remarkably short space these monster engines were slowed down and brought to a stand, and then pushed backwards. While that was an amazing and very impressive spectacle it was just as it should be. The capacity of a steam locomotive is limited to its own ability to make steam. It is a moving power house. Its boiler is limited by its dimensions, by the amount of coal that can be consumed in it by its steaming capacity. The electric locomotive, on the other hand, can draw as much power as may be required from a large stationary power plant—in this case a power plant of 15,000 h.p. Electric railways often receive power from a number of water-power stations and the capacity of these stations may run up to hundreds of thousands of horse-power. I trust I have made that point clear to the committee?

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By Mr. McKenzie:

Q. It is perfectly clear. But the question is this: Suppose you take equal units of power, you put a certain unit of power in a steam locomotive, and a certain unit of power on an electric wire. How would they act then?

Mr. COWAN: That is the way they do act.

WITNESS: The electric locomotive in question was equipped with 12 motors of 300 h.p. capacity each. That means that these twelve 300 h.p. motors would give that amount of power—3,600 h.p.—continuously; but, for short spaces of time, these motors will give a much greater amount of power than that. At least they can use a great deal more power. In fact, they will draw from the line as much power as they need. The limit of the work that a motor will do depends upon its heating limit. It is so constructed that it will go on receiving power and doing more and more work until it burns itself up. If electric power is supplied continuously from the power plant, it will keep on working and carrying large overloads until it burns itself out. The steam locomotive, on the other hand, is limited by the capacity and ability of its boiler to make steam. On electric railways an almost unlimited amount of power is always available between the trolley wires and the track, and the motors receive as much power as the work in each case calls for. One electric car may use 25 h.p.—another 200 h.p.—depending on speeds, loads and grades. They may not be using any power, or they may be using twice the amount of power at which they are normally rated. Is that point clear?

By Mr. McKenzie:

Q. Yes, but the difficulty is, as you say, one of those great engines is simply a moving power house.—A. That is the steam engine.

Q. The steam engine with limited possibilities, so to speak?—A. Yes.

Q. The other has a tremendous reservoir behind it and much greater power. For practical purposes there is a weight in favour of the electric powers?—A. Entirely.

Q. Because it is there.—A. Entirely. That is why an electrified mountain division, for example, can operate so much more successfully—in comparison with a steam operated road. The heaviest trains can be whisked up the heaviest grades. That is one of the chief reasons why such railroads as the Norfolk and Western and the Chicago, Milwaukee and St. Paul have turned to the use of electricity. The Norfolk and Western Railway electrified its mountain division—it has thirty miles, if I am not mistaken—simply because they could not take care of the traffic which was offering. They either had to build another track, or do something else, and that “something else” was electrification. They could not handle the traffic which was offering over their road. The congestion was caused by a combination of heavy grades and some tunnels. The electrification of the Chicago, Milwaukee and St. Paul was due to two causes—namely, the difficulty of handling its traffic and the fact that a plentiful and reliable supply of water-power was available.

By Mr. Keefer:

Q. What was the cause of the Hartford electrification?—A. There has been a great deal of discussion over the electrification of the New York, New Haven and Hartford railway. Its traffic was very heavy. Its electrified division is only about 75 miles, if I am not mistaken, and it is a four track road in places. It has, however, been criticized by many students of economics, in so far as the financial aspect of its work is concerned; but there is no doubt in the world that so far as electric operation is concerned it is very successful.

The chief reason for the electrification of the railways entering New York city was the smoke nuisance, which would not be tolerated; the accident in the Park avenue tunnel, some years ago, to which Mr. Fairbairn referred, hastened electrification in

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1906. The same reason (the "accident") is given for the electrification of the Sarnia and Port Huron tunnel. You may remember that a train stalled in the centre of that tunnel, and several men were asphyxiated.

In connection with the benefits derived from electrification, I will with your permission read a few extracts from a memorandum which I prepared two years ago for the Engineering Institute of Canada. Copies of this memorandum are available if members of the committee care to have them. (Copies were distributed.) Mr. E. W. Rice, who was president of the American Institute of Electrical Engineers, addressing that body in New York in February, 1918, made the following statement:

"It is really terrifying to realize that 25 per cent of the total amount of coal which we are digging from the earth is burned to operate our steam railroads—and burned under such inefficient conditions that an average of at least six pounds of coal is required per horse-power hour of work performed."

With your further permission, I will present some figures which will show the relation between power, heat, electricity and coal.

Mr. KEEFER: That is very important.

WITNESS: Mr. Rice states that an average of at least six pounds of coal is required per horse-power hour of work performed, and a very thorough investigation which has taken place since this was published shows that the average on the railways in the United States was seven pounds of coal per horse-power hour. Mr. Rice goes on to say:

"The same amount of coal burned in a modern central power station would produce an equivalent of three times that amount of power in the motors of an electric locomotive, even including all the losses of generation and transmission from the power station to the locomotive."

By Mr. McKenzie:

Q. To get that into my head, what do you mean by "horse-power hour"?—A. With your permission, I will postpone my answer to your question, it comes in better a little later on. Now you will please remember that steam locomotives consume 25 per cent of all the coal mined every year. Electric locomotives save two-thirds of that coal when their electrical energy comes from stationary steam plants. Water power can make them save it all. In other words I am an enthusiast in connection with the sane developing of water-power. Mr. Rice went on to say that 150,000,000 tons of coal, nearly 25 per cent of all the coal mined in the United States, were consumed in steam locomotives that year (1917). The railway consumption in Canada of coal is, I understand, about nine million tons a year. That is in round numbers about 30 per cent of all the coal mined in Canada and imported into Canada. Another reason for the electrification of the Chicago, Milwaukee and St. Paul railway was the successful operation of the Butte, Anaconda and Pacific railway, which runs through part of the same territory. The Butte, Anaconda and Pacific increased its ton mileage 35 per cent, and at the same time decreased the number of trains and their incidental expenses 25 per cent. In other words every electric locomotive could haul so much more than the steam locomotives that their ton mileage was increased 35 per cent, and the number of trains and their expenses decreased 25 per cent. Less trains and more tonnage! The time per trip for these heavier trains was decreased 27 per cent. It is also said that their saving in the first year's operation after electrification amounted to 20 per cent of the cost of electrification. That railway purchases its power from water-power plants as does also the Chicago, Milwaukee and St. Paul.

[Mr. John Murphy.]

By Mr. Cowan:

Q. How many miles of railway was the Butte, Anaconda and Pacific operating in this way?—A. I have forgotten the exact length of the Butte, Anaconda and Pacific; fifty or sixty miles.

By Mr. Keefer:

Q. Do you know their price?—A. I have not their price. I have the price of the Chicago, Milwaukee and St. Paul.

Q. What is that?—A. It is about five and a third miles per kilowatt hour. The exact figure is \$0.00536 per k.w. hr. On the Norfolk and Western railway power is obtained from their own steam station. Twelve electric locomotives have replaced 60 mallets of the most modern and powerful type. That is a fair illustration of the greater serviceability of the electric locomotive. Fifty per cent more work with less than 40 per cent of the engines.

By Mr. Ross:

Q. What is the round cost?—A. Do you mean the cost of each locomotive?

Q. Yes?—A. I have a memo showing the cost on the Chicago, Milwaukee and St. Paul Railway electric locomotives at the time they were purchased, and at the present time I understand the prices will be 60 to 100 per cent more than the figure will give you. They were \$120,000.

Q. The electric locomotive?—A. Yes.

By Mr. Keefer:

Q. And the steam locomotive of the same class would be what?—A. I have not the price of that here. There are none of the same class.

Mr. BLAIR: About seventy-five thousand dollars.

WITNESS: The Norfolk and Western railway increased its tonnage 50 per cent since electrification. Please remember that its traffic was tied up before they started electrification. The salvage value of the released steam engines was 45 per cent of the cost of electrification. They transferred, as did also the Chicago, Milwaukee and St. Paul railway, the steam locomotives to other sections of the railway. Their electric locomotives make eight times as many miles per train-minute-delay as the steam engines. Their terminal lay-overs average only 45 minutes, and they are doublecrewed every 24 hours. Pusher engine crews have been reduced from 8 steam to 4 electric locomotives. I would like to mention that these figures which I am now giving were obtained personally from the electrical engineers of the Norfolk and Western railway, and of the Chicago, Milwaukee and St. Paul railway. They are authentic. The pusher engines or locomotives have been reduced from 7 steam to 2 electric. The steam locomotives used to "fall down" in cold weather, and the electric locomotives always "stand up." They are really more efficient in cold weather. You will understand that these electric locomotives in cold weather will do more work than in warm weather. This whole railway electrification question was thoroughly discussed at the New York Railroad Club meetings by the electrical and mechanical engineers, and the Norfolk and Western Railway's engineer made the following statement:

"Coal, wharves, spark pits, water tanks and pumps, as well as roundhouses and turntables have disappeared from the electric zone. Our track capacity has been doubled. Our operating costs have been reduced. From an engineering, an operating and a financial viewpoint, our electrification has been a success."

Speaking of the value of regenerative electric braking he went on to say—and I could perhaps say a word about that—an electric motor when running down hill can

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be used as a generator to supply power to the line, and to help to pull other trains along the level or up hills, and, when so employed, and it has a load thrown upon in that way, it of course slows up the train, it helps to brake the train, that is what is meant by the expression "regenerative electric braking." On the Norfolk and Western railway, in that connection, the electrical engineer said:—

"The use of the air-brake is practically eliminated, it is only used to stop trains; it is regrettable we are unable to put dollars' and cents' value on this great asset; to appreciate it properly one must have had experience with the difficulties of handling 90 car trains with air. Trains of 103 cars are now taken over the summit, 12 to 20 times every day, down the 2.4 per cent grade without even touching the air. We never broke a train in two or slid a wheel. It is done so nicely we wouldn't spill a drop of water out of a glass in a caboose."

By Mr. McKenzie:

Q. You spoke about generating power while coasting down grades?—A. Yes.

Q. Is that generated power conserved in storage batteries?—A. No.

Q. How do you communicate it back to the wire? Do you communicate it back to the wire?—A. Through the trolley wire and the track; the power is sent out from the motors—in the reverse direction. Instead of drawing it from the trolley wire and the track the power is simply reversed or sent back.

Q. You send it back to the fountain head?—A. To the line. I will make a general statement to cover this point. An electric motor will run and do work if supplied with electrical energy. That same machine—the motor—will act as a generator if it is driven by a water wheel, by a steam engine or by the movement of the train. If it is made to run mechanically, it then may be used as a generator, and will give power to a line, or anything else, just as though it were set up in a power-house driven by a water wheel or steam engine. If it is connected with the source of supply, it will add to that source of supply. It will augment it like another power-house. This regenerated power—when braking—may be returned to the line, and may be used by other trains.

By Mr. Maharg:

Q. Immediately you commence to generate it goes back?—A. Yes.

Q. It has not to reach a certain point before it goes back?—A. No. It augments the power supplied from the power-house.

The Chicago, Milwaukee and St. Paul Railway first of all electrified 440 miles of their system over the first mountains on the way west. After operating this section for a couple of years they then electrified the Pacific Coast Mountain section, another 220 miles, and that should be an answer to the question as to whether the first section operated successfully or not. It was only after it—the latter—was in operation a couple of years that the coast section was electrified.

By Mr. Cowan:

Q. How many miles?—A. They are now operating 660 miles; that is 660 miles on a single-track mileage basis.

By Mr. Keefer:

Q. They first experimented with how much?—A. 440 miles.

Q. And found it unsatisfactory, and went on?—A. As a matter of fact the first electrified 220 miles and operated it, and then they immediately proceeded with the next 220 miles, but they operated the whole 440-mile section a couple of years before proceeding with the electrification of the Pacific lines. Nearly 900 miles of railway, and about 33 per cent in addition for passing tracks, yards, industrial

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acks, and sidings, now represent the extent of this great electrification. Their own officials state that among the advantages secured by this railway on its electric sections are the following:—

“The “cruising radius” of each electric locomotive is twice that of the steam engine. Subdivisional points, where freight crews and steam locomotives were formerly housed and changed, have been abolished; the passenger crews’ runs are now 220 miles instead of 110. For railway purposes these stations do not now exist.”

Mr. ROSS: Why is that?

Mr. KEEFER: They do not stop to water.

By Mr. Ross:

Q. They do not go twice as fast?—A. The speed has increased and time is saved other ways. The exact figure is given in the memorandum. Electric locomotives will run for nearly a month without having to visit the roundhouse. You all know, I assume, that a steam engine must go to the roundhouse after every trip over a division, about 120 miles. For railway purposes these sub-divisional points on the “Milwaukee” do not exist. Seven or eight miles of track at each old station have been taken up. Through freights do not leave the main track at all at these points. Shops and roundhouses have disappeared along with their staffs and one electrician places the whole old shop and roundhouse force. An electric locomotive has made 252 miles in one month. Although schedules have been reduced the electrics have “made up” more than $2\frac{1}{2}$ times as many minutes as steam engines running on the old slower schedule—“time” which had been lost on other divisions; 29% of electric passenger trains made up time in this manner. On a mileage basis alone the operating costs of the electrics are less than one half the steam engine costs. Freight traffic increased 40% shortly after electrification—double tracking would have been necessary to handle such increased business under steam operation. An average increase of 40% in freight tonnage, per train, has taken place. One electric handles about $3\frac{1}{2}$ times as many ton-miles as a steam engine; the reduction in time in handling a ton-mile is 30%; faster and heavier trains have accomplished these results; *the number of trains has not been increased.*

That is an interesting point. Mr. Fairbairn was asked something about the comparative traffic on their railway, and the Chicago, Milwaukee and St. Paul. I do not know what traffic there is on the C.P.R. but at the time of the electrification of the Chicago, Milwaukee and St. Paul, they had nine trains per day in each direction, and they had the greatest difficulty imaginable to move these trains over the divide. The congestion of traffic became unbearable. Their general manager in writing a reply to a question stated “we have now almost forgotten that there is such a thing as a ‘divide’-since electrification.” At the time that I heard from their electrical engineer he stated that about $11\frac{1}{2}$ per cent of the energy used by the railway was returned to the line in the process of regenerated braking, and this returned energy helps to haul other trains. In the following year they returned 16 per cent of the power used.

By Mr. Maharg:

Q. That would only apply, of course, to heavy grades.—A. Yes, where there is a lot of running down hill.

By Mr. Keefer:

Q. Is that one of the reasons why the allegation is made that it is more difficult on heavy grades?—A. I think that is only a myth. I think the chief reason is that you can get the train up over the hill at a higher speed.

[Mr. John Murphy.]

By Mr. McKenzie:

Q. Are those what they call momentum grades?—A. No sir, these are heavy load grades all in the same direction.

Q. You understand of course what I mean by momentum grades?—A. I do, going down one hill you gather so much energy that you can run up over the next. While this regenerating item is a very important one, their engineer says:

"It is only regarded by the management as of secondary importance in comparison with the more safe and easy operation of trains on the grades, and the elimination of former delays for changing brake shoes and repairs to brakemen when operating with steam locomotives. The electricians maintain the schedules much better than steam engines. In three months the electricians waited for the right of way 254 minutes, while the steam engines in a similar period waited 1910 minutes—or $7\frac{1}{2}$ times as long. Extra cars on trains on delayed electricians $\frac{1}{9}$ of the time steam trains were delayed for a similar reason. Cold weather delayed steam trains 445 minutes in the three months under discussion, but the electricians were not delayed a minute; the latter are more efficient in cold weather. Many of the delayed steam trains were double-headed—but never more than one electric is hitched to a passenger train. An entire suspension of freight service, due to steam engines losing their steam capacity and freezing up, was not an uncommon experience. Electric power for the operation of these trains costs considerably less than coal."

That question regarding cost was asked Mr. Fairbairn.

"This latter statement is one of the most interesting in connection with the operation of the C.M. and St. P. Railway and it is especially interesting because it was made more than one year ago."

That was in 1917, and their operating costs have been reduced since that time, I am informed. The Chicago, Milwaukee and St. Paul Railway is said to be closely associated with the companies from which they buy power, but I am not in a position to say whether that is the fact or not. I do know that they have a 99 years' contract and the rate for power is .00536 of a dollar per kilowatt-hour. In plainer English, that is about $5\frac{1}{2}$ mills per kilowatt-hour.

By Mr. Keefer:

Q. Convert that into horse power.—A. Their contract is so drawn that they have agreed to pay for 60 per cent of the peak power which they draw from the company, although they were using it continuously, 24 hours a day, and that figures out at about \$28.00 per horse power year. The price per horse power year, or the price per kilowatt hour, standing alone, is quite liable to deceive anyone who is not familiar with the buying and selling of power.

Mr. COWAN: That seems a very low rate for power, is it not?

Mr. KEEFER: No, it is high. Ordinarily we get power here for around \$25.00.

By Mr. Keefer:

Q. How do you estimate the horse power generated from coal?—A. I beg your pardon?

Q. Can you tell us how much would be the horse power generated from coal in that area as against the \$28.00? Can you roughly tell us that?—A. I cannot tell you what it might be there.

Q. Approximately, it would be two or three times the price of the horse power.—A. Undoubtedly.

Q. Probably four times?—A. Probably.

[Mr. John Murphy.]

By Mr. Blair:

Q. How are the cars heated on the Chicago and Milwaukee Railways? Where do they get their power?—A. They draw their electric power from a great many water power plants across the continent parallel with their own line. The cars are heated from the oil-burning boilers in the locomotives. They know better than to heat their cars electrically.

By Mr. Keefer:

Q. On account of the waste?—A. Electric heating is something that should not be done continually. With your permission I will give you figures later on that will make that plain.

By Mr. Cowan:

Q. Do I understand that they have to have a heating apparatus in each car?—A. No, in the electric locomotives they have a eating plant which consists of an oil-burning boiler, which makes steam for distribution to the trains.

Q. Just the same as the heat comes from steam locomotives?—A. Just the same as it comes from a steam locomotive.

The CHAIRMAN: This is all very interesting, but it may not be out of place to suggest that after all we have a limited time.

WITNESS: I am rather at a loss to know how much or how little to tell you.

Mr. KEEFER: Go ahead, you are doing very well.

WITNESS: These are general statements concerning the benefits from railway electrification. It is the greatest thing in the world if you can afford to do it.

By Mr. Ross:

Q. So far as these figures are concerned, they have applied to water-power plants.—A. No, the Norfolk and Western Railway generates its own power, it has its own steam power plant and burns coal. The New York, New Haven and Hartford Railway, which has been in operation for fifteen years, started off by burning coal, and it is still burning coal—in its own power house. It cut its own coal consumption in two after the first couple of years' operation. If I am not mistaken, the exact figure was 51 per cent of the coal consumption in the steam locomotives in the second year, and they are doing better than that now because their schedules are better arranged.

By the Chairman:

Q. What about the capital cost of changing from a steam road to an electric road? Is that not a serious obstacle?—A. Yes, it is very high.

Q. Can you give us some figures as to the cost? If they are not available, never mind.—A. These which I have are actual costs, of course they are much more valuable than any estimates which might be made. I have the figures here. The total cost, of their 440 routes miles which really amount to 650 miles of railway, was \$12,000,000; that figured out at \$18,500 per mile for their single track mileage and it was \$27,250 per mile, counting only, the route miles of the railway. Now, the last I heard from these people was to effect that these figures would have been doubled if the work had been done two years ago, and if done now it probably would cost about 60 per cent more—in round figures.

Q. Does that include the development of a power plant?—A. Oh, no. These people—the C.M. & St. P.—purchase power from power companies whose business it is to develop and sell power.

I think it is very important that the members of the committee should appreciate what a horse-power-hour means, and what amount of heat is contained in a pound of

[Mr. John Murphy.]

coal. Also the small portion of that heat which can be turned into power in steam power-houses. For that reason, I have prepared the following tables. I have reduced the figures to little problems in simple arithmetic, because I feel that if given in this manner the whole power question will be much better appreciated.

The CHAIRMAN: It might save time to have these tables inserted in the record.

WITNESS: I would like to say a word or two about them. Every one is familiar with the expression "horse-power." We are inclined to think that it is the amount of work that an average horse will do. As a matter of fact, it is one and a half times the average work of a horse. One horse-power is the amount of energy which must be expended to raise 33,000 pounds one foot in one minute. If that work is continued for sixty minutes or an hour, it is then one horse-power-hour. The kilowatt-hour is one-third more than the horse-power-hour. The kilowatt is 1,000 watts, and the horse-power is 746 watts, or practically 750, or, three-quarters of the kilowatt-hour. You are all somewhat familiar with the "kilowatt-hour." You have to pay for electric lighting and other things on that basis. The work which ten men will do, working fairly hard for ten hours, is supposed to be equivalent to the value of one horse-power. That will give you another idea of what a horse-power means. The mechanical equivalent of heat is 778 foot-pounds, or about $1/42$ of a horse-power. Heat is measured in British thermal units. To raise the temperature of one pound of water one degree Fahrenheit 1 B.t.u. or 788 foot-pounds of energy must be employed. Now to get the value of a horse-power before your minds in relation to the value of these units, you will please remember that a horse-power is equivalent to 2,545 British thermal units. That is, it would raise the temperature of 2,545 pounds of water one degree Fahrenheit, if all of the horse-power was turned into heat. Regarding the heat value of coal: one pound of coal, depending on its quality, contains from 9,000 to 15,000 British thermal units. In the following figures I have taken 12,500 British thermal units per pound, because that is a fair average for good coal.

By Mr. Chisholm:

Q. What is the average for coal?—A. 12,500 British thermal units per pound. During the war many power plants were supplied with coal which ran as low as 9,000 heat units per pound. At various steam-power plants a horse-power-hour is obtained by consuming the following amounts of coal. This is the arithmetic of the problem which I would like to present to you as clearly as I can. In the most efficient steam power-house in the world you will have to burn $1\frac{1}{4}$ pounds of coal to get a horse-power-hour. If you turn to page 2 of this memorandum, in the second paragraph opposite the letter "A" in brackets, you will see one and one-fifth pounds of coal containing fifteen thousand British thermal units ($1\frac{1}{4} \times 12,500 = 15,000$) only produces 2,545 British thermal units (1 h.p.hr.) in the shape of power for use. That is the equivalent of a horse-power-hour. In other words you can only get, for use, 17 per cent of the heat energy that is in the coal; and that is in the best steam-power plant in the world. Now in good average plants five pounds of coal per horse-power-hour are used; in other words 62,500 heat units are burned up, or used up, and you only get 2,545 out of it. Four and one-tenth per cent of the heat of the coal is all that is available in the shape of power. Under letter "C", a railway locomotive taking seven pounds of coal per horse-power-hour, uses 87,500 heat units and only two and nine-tenths per cent of that amount is available for use; while in the ordinary small steam plant such as is found throughout the country, fifteen pounds per horse-power-hour are used to get one horse-power-hour. In other words one and one-half per cent is available for use, and the rest wasted or destroyed.

By Mr. Maharg:

Q. What is the average amount of coal that is utilized in the ordinary heating plant in houses?—A. About 50 per cent, from 50 to 60 per cent. If you turn to page

[Mr. John Murphy.]

three of my memo you will find that a pound of coal containing 12,500 heat units will supply from a house furnace about half of the heat units in the coal—assuming 50 per cent goes up the chimney. Now that 50 per cent of the coal is equal to 6,250 B.t.u. and that is equivalent to two and one-half horse-power-hours. Then, following the figures, you will see that from the furnace you can get the horse-power-hour-equivalent in heat by consuming only two-fifths of a pound of coal. When you start to use electricity for heating from the best steam station in the world, you have got to use one and one-fifth pounds of coal to secure as much electrical heat as you could get from two-fifths of a pound of coal in a furnace (three times as much). You have got to use fifteen thousand heat units in the best steam plant to get 2,545 electrically. In a steam locomotive you have to use 87,500 to get 2,545, and, in the average steam plant throughout the country you have to use up 187,500 heat units to get 2,545 B.t.u. Nearly 99 per cent is wasted or lost in the last operation; that is the reason why Italy prohibited the sale of electric heaters.

With your permission I will read an extract from the Fuel Controller's Report, which I had the privilege of writing for the fuel controller a couple of years ago; it deals with the electric heating question in perhaps a more concise way than could be stated orally.

"Electric heating, with energy from hydro-electric plants, is a problem which the public seems to like to discuss. But the fuel controller is of the opinion that the substitution of electrical energy for fuel in domestic heating cannot play an important part in solving Canada's fuel problems. There are three reasons for that conclusion; first, although the potential capacity of our water-powers is enormous, they are insufficient to electrically heat our present homes—to say nothing of future growth—and at the same time to meet our light and power requirements; secondly, the tremendous cost of the power plant and of the power-transforming and transmitting equipment—all of which would of necessity be in use at the same time in cold weather, and none of which would be needed for heating in warm weather—puts electric heating beyond practical consideration; and thirdly, because the proposal to use electrical energy for heating is based upon unsound scientific principles."

There is a little problem in arithmetic on page 3 of my memorandum which makes that point plain:

"When electrical energy is to be transmitted from one point to another, wires of ample dimensions are employed so that the resistance losses—analogueous to friction losses in a water-piping system—shall be reduced to a minimum. Electrical energy is a high grade type of energy which should not be wasted. But in the ordinary electric heater the heating element is in the form of resistance, and all the electrical energy in question is thus degraded from a high type of energy to a low type.

"It requires about 25 horse-power of electrical energy to heat a well built eight-roomed house."

That is quite a moderate estimate. It takes 35 horse-power in many cases.

"Ottawa, with a population of about 100,000 had some 25,000 buildings of all types. To electrically heat even 20,000 houses, for example, each needing 25 horse-power at the same time, would entail a power plant and transmission installation of 500,000 horse-power."

If you take a look at the Chaudiere falls from this room and see the large industries that have there grown up, and remember that these falls operate all these industries, and also supply the light and power needs to all the country around, as well as to the street railway, and also remember the total power development there is only 100,000 horse-power, you may realize what 500,000 horse-power would be.

[Mr. John Murphy.]

By Mr. McKenzie:

Q. Is that its limit there?—A. Yes, that is a great deal more than you can obtain under lower water conditions, and this last statement is supported by the smoke stacks you can see from the windows on the western side of Parliament Hill. Those stacks are on the steam power plants which are used to supplement or augment the supply of water.

"This 500,000 h.p. is 25 per cent more power than the total capacity of the three large power companies at Niagara Falls, Ontario, and it is about five times as much energy as is normally available from the whole of the Ottawa river at Ottawa and Hull."

To obtain for one hour 25 horse-power in the form of mechanical energy from coal, in a modern steam-power plant, requires the consumption of about 100 pounds of coal. But to obtain the equivalent of 25 horse-power for an hour from a coal-burning furnace, in the form of heat, only requires the consumption of less than 10 pounds of coal—even when 50 per cent of the heat is lost "up the chimney." Therefore, by making proper use of power from water falls, more than ten times as much coal can be saved by replacing steam engines with electric motors, as could be saved by replacing coal furnaces by electric heaters."

In other words, if you attempted to heat this building we are in by electricity and were obtaining electricity from the steam power house, you would have to burn ten times more coal in a steam power house to give you the same amount of heat that you could obtain from one ton of coal if you burned it in or near this building.

By Mr. Blair:

Q. Is there any opportunity of improving this condition?—A. No, that is a lamentable fact—but a fact nevertheless. Electrical energy is turned into heat at an efficiency of 100 per cent; nothing is lost in conversion; you can secure the whole of it. If you turn electrical energy into heat it is converted at an efficiency of 100 per cent. You get it all, none is wasted. If you had horse-power delivered at the window, you could turn it all into heat. Nothing is lost—but the whole of it does not go very far for heating.

By Mr. Keefer:

Q. It is quite clear from what you say that you cannot get economic heat electrically. Does the converse apply in industrial life? Applying it to the industries, you can save your fuel by using electricity?—A. Yes, surely, by using the electrical energy for power whether it is for railway or shop work of any kind.

Q. It is the converse?—A. Yes. Electrical energy should always be used to replace any machinery driven by steam power.

By the Chairman:

Q. In reference to the heating of houses, is there not a possibility of improved methods of distributing heat through the houses under the present system?—A. I am not sufficiently familiar with the subject to answer satisfactorily.

By Mr. McKenzie:

Q. But the use of electricity for domestic heating is out of the question?—A. It is out of the question entirely, and no one who is familiar with electrical work will attempt to combat that statement. It is a well recognized fact.

By the Chairman:

Q. I want to get your opinion as to the possibilities of the future?—A. It is one of the most unattractive fields for an electrical engineer.

[Mr. John Murphy.]

By Mr. Keefer:

Q. Would you rather go on and finish your statement?—A. No, I feel I have said as much as I can.

Q. I would like to ask you a few questions unless you wish to make a further statement?—A. If the chairman feels I have covered the ground I am satisfied.

Mr. KEEFER: Give him sufficient latitude to make his statement. We are getting more useful information from this witness, for the purpose of our investigation than we have obtained from any one we have had before us yet, and we should not choke him off.

Mr. COWAN: Nobody is trying to choke him off.

The CHAIRMAN: No, if there are any other points he wishes to speak about the committee will be glad to hear it.

By Mr. McKenzie:

Q. You say that you get more power out of coal electrically applied than if it were used direct? Do you understand that question?—A. Yes, I think so. You are referring specifically to steam locomotives?

Q. How does that come about, that you get more work out of electricity that you produce by the burning of a ton of coal than using the coal by throwing it into a boiler?—A. Of a locomotive?

Q. Say a locomotive?—A. To begin with, the locomotive cannot carry a condensing plant. As you probably all know or may see after a moment's consideration the employment of a condenser at steam power houses results in very large fuel economy. In a stationary steam power plant every conceivable economic device may be installed. There is lots of room to install them. The cold-water-supply in abundance is available for condensing purposes. But a locomotive which is compelled to carry everything it uses cannot be equipped with condensing apparatus. It is out of the question; and that point alone makes a tremendous difference between the economy that can be effected on a steam locomotive and at a stationary steam power plant. That is the chief reason.

Mr. KEEFER: I have heard this statement by a Senator of the United States Government, speaking in the United States, that if the war had lasted another year (referring to the coal question) the United States Government were considering the building at the coal fields a very large electrical power plant generated from coal, and requiring the coal industries to come to the coal, instead of the coal to the industries. That was due to conditions we were working under in 1919 and 1920 as to the cost and difficulties of the transportation of coal?—A. Surely.

By Mr. Cowan:

Q. What is the maximum distance over which electricity can be profitably transmitted? Take that railway which you spoke of being 600 miles electrified, how far have they been able to convey their electricity profitably?—A. I do not think there is a point on that railway where they have to transmit power more than 100 miles. They obtain power from a number of power plants which are located parallel with the railway line. They have sub-stations located along the line on the railway about thirty miles apart. These stations receive power at high tension, very high tension power lines, and they convert it at those sub-stations into power that is available and suitable for the railway.

Q. Supposing a big power plant were established at some point where there was coal. How far could they transmit that profitably for industrial purposes from these sub-stations?

Mr. KEEFER: Take California.

[Mr. John Murphy.]

MR. COWAN: I would like to take my own city. We have coal of all kinds 100 miles from the city, and we develop electricity in Regina from the coal in part brought from that actual coal mine. A number of us have felt for years that the proper thing to do was to locate our plant down at the mine instead of hauling the coal, but that proposition has been knocked.

WITNESS: There are figures available which I would be very pleased to get for you. They would be of much more use to you than any statement I could make.

MR. COWAN: I wish to get information for my own use.

MR. ROSS: We are transmitting electricity in Ontario from Niagara Falls to Windsor.

WITNESS: Yes, nearly 250 miles of transmission line. I have heard it stated by an engineer employed by the commission that it is actually cheaper—a better proposition, economically—to develop steam power at Windsor, or at Sarnia, than to transmit it from Niagara Falls. I have not the figures, but I can get them if you wish.

By Mr. Cowan:

Q. Is there any loss in transmission, and if so to what extent?—A. Surely there is.

Q. Is modern science overcoming that loss in transmission?—A. Yes. For example in California, at the present time, they are arranging to transmit power, from water-power, 500 to 600 miles. That is made possible by the employment of very high voltages, approaching 250,000 volts, more than twice as high as that employed on any lines in operation in any part of this country, up to a comparatively short time ago insulators and insulating material were not available to withstand those very high voltages; but insulators have been developed which will withstand those high voltages and a line is actually being constructed in California which will transmit power at 250,000 volts. This brings me back to the statement which I made in the beginning. When electric light was first started the generators operated at the same voltage as the lamps—at about 110 volts. That was why the generators had to be located close to the lamps in the same buildings. By putting two of those generators side by side the voltage was doubled and 220 volts were employed later on. The alternating current system, which made use of the transformer, was later developed. The transformer is a piece of apparatus which will change the voltage, it will either raise it or lower it. It is perhaps more commonly used to lower it. The power is transmitted to it at a high voltage, and it thus comes into the transformer which changes it to a low voltage. The high voltage is employed so that a small and comparatively cheap conductor may be used. The cost of conductors, with a very low voltage, would be so great as to make it prohibitive to operate a power plant a mile away. The transmission of electrical energy is comparable to the transmission of water. If the pressure is low, you must have a very large pipe to carry a large volume of water; and, if you have a very high pressure, you can use a small pipe. And so with electricity, if the voltage is high you can use a small conductor. It all comes back to a question of arithmetic.

By Mr. Keefer:

Q. Coming to Ontario and the hydro-power, you heard Mr. Fairbairn's statement as to the question of power plants being installed in the St. Lawrence territory, and as to the amount of water-powers in the St. Lawrence system being a factor in electrification. What do you say about that?—A. I heard Mr. Fairbairn's statement, and I agree with what he said. If a large and certain power supply were available, and if the prices were reasonable, I think the railways would be compelled to deal with the subject of railway electrification.

[Mr. John Murphy.]

Q. In the city of Ottawa and neighbourhood there are water-powers irrespective of the St. Lawrence?—A. Are you referring to the water-powers on the Ottawa?

Q. The Ottawa and its tributaries.—A. There is a million horse-power undeveloped within easy transmission of Ottawa—on the Ottawa river and its tributaries.

By Mr. Cowan:

Q. A million?—A. Yes.

Q. Undeveloped?—A. Undeveloped.

Q. That is not including the St. Lawrence?—A. No, that is apart from the St. Lawrence altogether.

By Mr. Keefer:

Q. What is the total horse-power potentially on the St. Lawrence?—A. Undeveloped?

Q. Let us take what is developed first?—A. You have perhaps the figures in mind better than I have.

Q. But you are the witness, and I would like you to give them.—A. In round figures, there is said to be between 4,000,000 and 5,000,000 horse-power undeveloped below the lakes. I would like to read a couple of other short extracts in connection with the subject of railway electrification.

Q. Before you leave the question of water-powers, that 4,000,000 to 5,000,000 horse-power is equal to what amount of coal, if it were all used, per annum?—A. That is a question that is difficult to answer in a word—it is complicated.

Q. Take the average boiler engine you get anywhere from five to fifteen horse-power.—A. The quantity of coal used by many persons, for talking purposes, per horse-power year is 10 tons; some people say 20 tons. One horse-power-year, that is 1 h.p. used every hour in the year would require several times either of these figures. There are 8,760 hours in a year and I have shown the best steam plant needs $1\frac{1}{2}$ pounds per horse-power-hour—many use 15 pounds. Those figures make the answers vary from $5\frac{1}{2}$ to 63 tons.

Q. Take it at 10 tons. That would be 40,000,000 tons of coal running to waste?—A. Yes. If the power were used 24 hours a day, it would amount to much more than that if supplied from small steam plants.

Q. More than 40,000,000 tons?—A. Much more than that. Mr. Fairbairn made a statement in connection with the problem of railway electrification, and I would like to add a word in that connection because it is most important. I have given you figures which show the huge quantities of coal which can be saved by railway electrification, even if the railways were operated from large steam power plants—to say nothing at all of the tremendous saving if operated from water-power plants. But I do not think there is an electrical engineer who would say off-hand that such a railway should be electrified. I have here a statement made by Mr. A. W. Gibbs, of New York, who is the chief mechanical engineer of the Pennsylvania system. He has been connected with all their electrification projects in and around New York and Philadelphia, as well as many others. Railway electrification has been discussed at great length in and around New York by technical societies, railroad clubs and other organizations. These bodies have secured the most expert specialists from the electric manufacturing companies—those which sell railway motors, etc. They have also secured experts from the power producing companies, the companies that want to sell energy, and they have had the experts from the railways, the men who must “deliver the goods” to the management. All phases of railway electrification have been discussed very thoroughly at these meetings, and Mr. Gibbs, who is a very broad gauge man, summarizing what had been said spoke in one of his statements as follows:—

“The claims for fuel saving have been greatly overstated because the comparisons which are made are not with the potential performances of the best steam locomotives.”

[Mr. John Murphy.]

Now, I quote that statement in order to connect it up with the statement which appears in the memo. that I prepared showing that seven pounds of coal are required per horse-power hour on an average on steam locomotives. Mr. Gibbs points out that steam locomotives can be built to-day which will consume only about one-half of that. Therefore, when this subject is being discussed before technical men, the cold facts and all the facts, should be given. Notwithstanding what he says, and my explanation of it, the seven pounds of coal, per horse-power hour, stand as the amount of coal used on locomotives throughout the United States, that is, the average amount. You must remember that locomotives burn up coal even when standing still. They burn up coal while standing in the roundhouse. Mr. Gibbs makes another important statement as follows:—

“Personally, I believe that many roads now operated by steam will be operated in whole or in part electrically, but that this will not be decided in the off-hand manner advocated by some. It is to be noted that practically all of the electrifications on steam railroads so far have been based on local conditions. In the electrifications in and around cities a moving cause has been the elimination of smoke and other objectionable features incidental to steam operation and the possibilities of increasing the capacities of the passenger terminals. On the Milwaukee road it was the utilization of available water-power. On the Norfolk and Western it was to secure increase in capacity on a congested mountain division with tunnel complications. It is fair to assume that other electrifications will be similarly governed by local conditions.”

His concluding words are that electrification is always largely a question of economics. He says:—

“If, after careful consideration of the road, based on actual train sheets for the heaviest actual or probable congested operation, the capacity and number of active and available locomotives required, crediting the operation with incidental savings which may be effected, and eliminating expenses peculiar to steam operation, it appears that there would be economy in electrification, either from actual savings or better operation, or both, it still remains for the management to decide whether the money required can be spent to better advantage for electrification than for some other feature of the general operation.”

On a small railway where there are, say, the steam locomotives, these ten locomotives may be standing still much of the time, all burning some coal—wasting coal. If you build a steam-power plant or a water-power plant to supply that road with the same energy which it could obtain from these ten steam locomotives, you would have to build it ten times the size of one locomotive, because these ten locomotives may start off at one time. The ten locomotives may or may not be moving at one time; but if they are standing still much of the time it would probably be uneconomical to build one power-house to operate that road. Mr. Gibbs goes on to say:—

“In this connection it must be remembered that on originating roads a considerable part of the locomotives assignment is devoted to service on the branches feeding the main line and forming part of it, and that in this service they make little mileage.”

I think that this point has a bearing on the question asked by Mr. Cowan earlier in the day. Mr. Gibbs goes on:—

“If these branches are electrified, their operation will be a decided drag on the economies of the main electrification, for the reason that each of the steam locomotives will have to be replaced by an electric one, with its greatly

[Mr. John Murphy.]

increased first cost with small use to justify. If they are not electrified and the operation of the district is part steam and part electric, locomotive terminals, organizations and all that go to make up steam operation must be retained to an extent."

In other words each case is a problem by itself.

By the Chairman:

Q. Have you finished your statement?—A. I think so, Mr. Chairman.

By Mr. Cowan:

Q. You have referred to a great many American roads, but the road I spoke of, from Toronto to Guelph, is probably the longest electric road in Canada. Why have you not made any reference to that road? Is it not of sufficient importance.—A. Not in my opinion in discussing the broad subject of railway electrification. That road resembles an extended electric street railway.

Q. You do not know anything about any peculiar difficulties they have encountered in operating in Ontario?—A. I would not expect they would have any great difficulty.

Q. You do not know of any?—A. No, I am not familiar with the details, but I would not expect any difficulty.

Q. Do the heavy wet snows which we have in Ontario affect it in any way?—A. I think the electric locomotives in service on the Chicago, Milwaukee and St. Paul Railway, through the mountains, have proven that they can cope with any storm in a better manner than any steam locomotive ever made.

Q. That is what I have heard, and I wanted it confirmed. I understand that they have really less difficulty in operating electric trains in a country like ours where we have snow storms, and in Ontario where we have such wet snow—less difficulty than with any steam locomotive?—A. I think the electric locomotive is capable of fighting its way through a storm better than steam locomotive. A steam locomotive always suffers from want of steam in cold weather, and an electric locomotive has the power available.

By Mr. Keefer:

Q. Speaking of electrification, take the trip from Montreal to Toronto, with the Trent Valley system of power, and also the St. Lawrence system, would you consider that a very favourable condition?—A. When you mention the Trent Valley system, do you realize that that system has been over-loaded and that no spare power is available?

Q. Then take the St. Lawrence, from Montreal eastward and westward that is a local condition that ought to be favourable?—A. Tremendous quantities of power available in the district.

Q. Yes, only a question of getting it developed?—A. Yes.

Q. From Montreal to the Prairie section as a matter of fact we have water powers all along the line?—A. Yes.

Q. Ready for development?—A. Yes.

Q. One of the recent ones just come into development is the Nipigon River?—A. Yes.

Q. And so it is all along the lines of the Canadian National Railways, and what about the Canadian Pacific? Do you know about that?—A. No, not personally.

Q. What would you consider off-hand roughly? Take the first section of the St. Lawrence River which is international, what would you consider would be the horse-power cost in that district approximately?—A. I have no idea.

Q. We will have that from the engineer?—A. Yes, I think so. People are accustomed to talking about \$200 per horse-power of water-power these days. I do not know whether that is right or not. Each case must be taken separately.

Q. We will have that. The engineers are busy at that now.

[Mr. John Murphy.]

By Mr. Cowan:

Q. You do not know how the accidents compare on these electrically controlled roads and on the steam roads, whether they are more or otherwise?—A. I would not expect there would be any material difference.

Q. They should have statistics showing that. You have never studied that question?—A. No, I would be surprised to find if there was any material difference.

By Mr. Keefer:

Q. Do you know the Toronto, Hamilton and St. Catharines Railway in the Niagara district?—A. I know something about it.

Q. It was operated as a steam railway?—A. Yes.

Q. And converted to electricity?—A. Yes.

Q. About how long ago?—A. I do not remember.

Q. Approximately?—A. 15 or 16 years.

Q. Since then its electrical operation has been quite efficient and satisfactory?—A. I would not say that.

Q. What do you know about that?—A. From what I know I would say there would be no difficulty in operating it electrically, none in the world, but I do not know anything about its financial position. From an economic point of view I am not able to say anything about it.

Q. It carries a larger number of passengers?—A. Yes.

Q. And also carries a lot of freight from different railways, main line railways at Welland, St. Catharines, Thorold, Niagara Falls, and all along there?—A. Yes, I have seen some freight going on there.

Q. You have never paid much attention to it. I have seen it under my own eyes. I have seen the electric motor pulling all the freight cars up that hill?—A. Yes, but this is merely a toy railway compared with what I have been speaking of.

Q. But it is one of the pioneers in Canada?—A. It is only comparable to those large projects of which we have been speaking in the way a toy engine would be comparable with a good sized engine. It is very small. More like a street railway than like a large railway.

Q. It is serving all railways, pulling the freight in from them at the divisional point? (No answer).

By Mr. McKenzie:

Q. As a matter of general information, could you tell us the amount of power electrically developed at Niagara by the Ontario Niagara Electric Company?—A. In operation at the present time, if my memory serves me, there is about 225,000 horse power developed by the Ontario Power Company, which is operated by the Hydro electric Power Commission.

Q. That is the concern I have in mind, 225,000 horse power?—A. Yes, there are two other companies with large power plants located quite close to that one, one generating 150,000 horse-power and the other about 100,000 horse-power. These plants are now in operation. I presume these are the ones to which you refer.

Q. What do you say about the possibility of developing at Niagara Falls, if it was developed to its capacity, all that the Canadian people could get at the Niagara Falls? What would you say would be the top notch capacity?—A. I have not those figures in mind. They are very well known, and I could get them if you wish. It would depend on the amount of water you use of course.

Q. Just general information. It is a useful thing to know. It is satisfactory to know. The ordinary individual looked upon the power on Niagara as practically limitless?—A. Yes.

Q. I suppose it is not so?—A. Oh, no. A great many contend that no more water could be used now—because they say it would spoil the scenic effect. That is not the general belief of engineers.

[Mr. John Murphy.]

By Mr. Keefer:

Q. Canada is entitled to 36,000 cubic feet per second flow. She is using 30,000 to-day, and only 6,000 more to come?—A. I have not those figures in mind.

Q. I think you will find those are the figures?—A. That would be one-fifth more than she is using at present.

Q. And they are building a canal down to Queenstown in order to get the full head, instead of using it at Niagara Falls, as up to date they have been using it. They are now taking it down to Queenston, but the flow is limited under the treaties between the two countries?—A. Yes.

Q. United States is getting 20,000 cubic feet, and we get 36,000. Are you familiar with that feature?—A. No answer.

WITNESS: The editor of the Electrical World, the most prominent electrical publication in the world, in referring to the small amount of energy obtained from the burning coal in steam plants and the ease with which electrical energy is transmitted, in an editorial a short time ago made the following statement:

“Why continue to haul millions of tons of coal for and by uneconomical steam locomotives, all over the country, and thus add more loads to the already overburdened railways, when the power which they need so badly can be much more economically and efficiently transmitted to electric locomotives over a wire the size of one’s little finger?”

By Mr. McKenzie:

Q. You have been answering that question to-day?—A. Yes.

By Mr. Keefer:

Q. Do you know anything about the London and Port Stanley railway?—A. Only what I have read in the papers.

Q. You are not familiar with it?—A. I have read in the papers that at least one member of the Ontario Railway and Municipal Board does not think it is a financially successful institution.

Witness discharged.

The CHAIRMAN: Telegrams have been sent by the clerk of the committee, Mr. Lowe, to Roy M. Wilvin, president of the British Empire Steel Corporation, and to D. H. McDougall, president of the Nova Scotia Steel and Coal Company, summoning them to appear before this committee on Wednesday, May 11.

The committee adjourned until 10.30 to-morrow.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

May 11, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steel, presiding.

The CHAIRMAN: I have received a couple of messages, which I will read for the information of the Committee. The first telegram reads:—

Montreal, Québec,

May 10, 1921.

Mr. Steele,

Chairman, Parliamentary Fuel Committee,
House of Commons,
Ottawa, Ont.

Regret will be unable to have ready for Wednesday cost data which has been requested by Fuel Committee. Writing.

D. H. McDougall.

I have not received the letter yet. Then a message from E. P. Merrill, General Manager of Dominion Coal Company, Sydney, Nova Scotia, May 10, 1921.

Thomas W. Howe,
Clerk, Fuel Committee,
House of Commons,
Ottawa, Ont.

Your telegram to McIssacs requesting freighting cost water-borne coal Sydney to Montreal 1912 to date; believe our controller Gordon now Ottawa prepared give this information.

This was received in reply to a wire sent by the Clerk of the Committee in accordance with the desire of the Committee. Mr. Gordon, so far as I know, is not present in the Committee, and I have advice from other sources that he is not in the city. I presume under these circumstances the only thing we can do this morning is to go on hearing the witnesses from the Ottawa Gas Company. We have Mr. Gordon on the coke question.

Mr. DOUGLAS (Cape Breton): What do you propose to do with the telegram or the order that was sent to this company? They do not state in their reply when they will be ready and we have no intimation when they will be ready.

Mr. MAHARG: Probably their letter will clear up that point.

The CHAIRMAN: The messages are before the Committee. That is all the information I have in the matter.

Mr. McKENZIE: I do not know Mr. Gordon.

The CHAIRMAN: I inferred from the message received last evening that he was here, but I understand this morning he is not here.

Mr. DOUGLAS: Do you think he is in Montreal?

The CHAIRMAN: I do not know. There is evidently a misunderstanding between the sender of this message and possibly the Montreal office. The only thing we can do is to get in touch with the Montreal office and ascertain if he is there, and when

he will be before the Committee. Shall we proceed with the evidence on the coke question?

Mr. DOUGLAS: Let us dispose of this question first.

The CHAIRMAN: What do you say, gentlemen?

Mr. COWAN: I do not want to ask the company to do anything that is impossible but if they were not able to get this ready to-day they should have indicated to in their telegram when they would have it ready, and I think a wire should be despatched to them immediately telling them that this Committee requires this immediately, and asking when they are going to be able to furnish it.

Mr. MAHARG: That is in connection with the auditors?

Mr. COWAN: Yes.

Mr. MAHARG: They stated in their wire that they were writing. That would mean a letter of explanation.

Mr. McKENZIE: Is Mr. McDougall's wire from Montreal?

The CHAIRMAN: Yes.

Mr. McKENZIE: It should not take long to get that letter.

Mr. DOUGLAS: Mr. McDougall's telegram has reference to the Nova Scotia Steel and Coal Company?

The CHAIRMAN: I presume so. He does not state in the message, but he is the President of the Nova Scotia Steel and Coal Company.

Mr. DOUGLAS: So that we have no word at all from the Dominion Coal Company.

The CHAIRMAN: I presume this message of Mr. Merrill's has reference to the Dominion Coal Company.

Mr. DOUGLAS: No word whether Gordon is coming or not.

The CHAIRMAN: Nothing more than this message.

Mr. DOUGLAS: Of course that message is dealing with another matter. He incidentally says he expects Mr. Gordon is somewhere around here, but as to whether he is going to come and bring the books the Committee requires—there is no information as to that. One would think if he wanted more time he would have asked for it. More time has been asked for in the case of the Nova Scotia Steel and Coal Company, but in this case the Committee's request for the attendance is absolutely ignored—not even a telegram. If there were some reasonable explanation it might be justified, but there is no reasonable explanation given.

The CHAIRMAN: The matter is before the Committee.

Mr. McKENZIE: Why not wire back to General Manager Merrill asking for a positive statement as to when the man will be here?

Mr. COWAN: I think so. We cannot afford to have the Committee toyed with but if anybody started that game with me I would call them pretty quickly. They may not be doing that at all, but I do think they should have been more definite in their telegram as to when they will be here, and it looks rather suspicious to me. I think a wire should be sent asking for a definite statement as to when we could have that statement.

The CHAIRMAN: I made the suggestion that we should get in touch with the Montreal office and ask if Mr. Gordon is in Ottawa or Montreal, and when he will attend.

Mr. ROSS: And ask an immediate reply, so that they will know we do not intend to be fooled with. They think it is near the end of the session and that perhaps the thing will die a natural death.

The CHAIRMAN: Will the Committee form a motion as to what will be done?

Mr. COWAN: I move that a telegram be sent to the proper parties, asking when they will have these cost sheets, and when they will be able to attend, and ask for an immediate reply.

Mr. ROSS: And add to that that it must be done immediately.

Mr. COWAN: I do not want to ask the impossible, but I think we should have it clearly understood that there is to be no nonsense permitted.

Mr. DOUGLAS: They were not required to prepare any statement, so that really no term will be required at all. It was to produce papers and original cost sheets.

The CHAIRMAN: Better draft your telegram.

Mr. COWAN: Yes, and we will come back to it.

The CHAIRMAN: I will ask Mr. Dion to take the witness stand.

Mr. MCKENZIE: Will you draft the telegram now?

The CHAIRMAN: Did you wish to wait until this is finished up?

Mr. COWAN: I will have it in a minute or two.

The CHAIRMAN: I would say, do not draft a telegram; leave it to some one in whom you have confidence to send a telegram and put it definitely so that they may not be able to get around it. If there is nothing definite, they may be able to get around it without giving anything more satisfactory.

Mr. DOUGLAS: This question of costs came up before in connection with one of these companies, in connection with the charge against the Coal Company for conspiracy some years ago, and it was necessary to obtain the books of the company. The books were in Halifax and spirited away to Montreal, and as far as the investigation was concerned they were never able to get the information they wished to receive, and apparently the Parliamentary Committee is treated about the same way. I do not think we should be mealy-mouthed about the matter. These people do not intend to give it; that is fairly evident. It was evident from the first letter from Mr. Wolvin wanting to know if we wanted Price, Waterhouse & Company to come and give us information.

The CHAIRMAN: I think as Chairman of the Committee I should make a suggestion.

The CHAIRMAN: I think you will find there is considerable doubt if the Committee has the authority to call for these documents.

Mr. DOUGLAS (Cape Breton): Why do they not come here and make that objection?

The CHAIRMAN: It would not be for them to make the objection.

Mr. DOUGLAS (Cape Breton): I think it would.

Mr. ROSS: The president himself said they had no objection.

The CHAIRMAN: That is what I have reference to, that is, whether the Committee, under the Reference of Parliament, can call for these papers.

Mr. COWAN: It says "To call for all books, papers and documents."

Mr. ROSS: What is our Reference? Let us see where we are at.

The CHAIRMAN: I think the Committee all understand it "To inquire into all matters relating to the future fuel supply of Canada"—I am not giving that as my own opinion, because I would not presume to give an opinion on that matter, but there are others whose opinion I value—

Mr. MAHARG: Wherein lies the trouble? Is it within the Reference, or is it beyond the power of the Government to give the authority?

The CHAIRMAN: No.

Mr. MAHARG: Then it must be that the reference was not wide enough.

Mr. COWAN: What limitations—

The CHAIRMAN: I merely am advising the Committee of—I would not say the information I have—but the idea that I have in my own mind from information I have received as to that question. I am not prepared to say that the Committee has or has not the authority.

Mr. MAILARG: I think we should move. We have been sitting here now for weeks and when we are on the way to getting the information which we deemed necessary we find our hands tied and lacking power. There is something wrong somewhere.

Mr. ELKIN: I would like to say unofficially, and not for the record, that the directors of the Dominion Company, of which I am one, did not take this step. That is not our stand, that the Committee has no authority,—

The CHAIRMAN: I am not putting it forward as a communication from the company at all, because I have had no communication with them on the matter.

Mr. COWAN: Well, that makes it necessary for us to find out immediately whether they are prepared to come here or not. If we find they are able and not prepared that is one question, but if we find that they refuse we will have to find out what our powers are, and see what we can do. I think we ought to have a clear, definite statement from them as to their intentions.

The CHAIRMAN: However, we can go ahead with our programme.

Mr. MCKENZIE: I did not know we had one of the directors here. Surely we can get into communication with the company through him, without any difficulty. One of the directors is here who undertakes to say that they are not taking any objection—

Mr. ROSS: It is just as bad not taking any objection as not to produce. They have had a couple of weeks now to produce these papers, and if they do not take any objection and yet do not produce, what is the difference?

Mr. MCKENZIE: What I meant, Mr. Chairman, is that we are right in touch with the company here and can find out what they are going to do. That is what I mean.

Mr. ELKIN: Again, unofficially, Mr. Chairman, I think the Committee should be guided correctly in this matter. The order for the production of the auditors' statement was given to Mr. Wolvin, and Mr. Wolvin was going away to England and was so busy with other things that he did not give this matter the attention it should have. As a matter of fact, Mr. Dougall, who was here last Monday, said that that was the first he understood that these things were to be produced. On behalf of the Dominion Company, I am only giving this by way of explaining that Mr. Gordon came to Montreal yesterday, and when Mr. Dougall got into the matter of the costs, he found that they were not in such shape as to permit of their being presented to the Committee, and he held Mr. Gordon over to check up these things. That is what he told me over the telephone last night. So far as the Dominion Coal Company is concerned, there is certainly no evasion on their part and this explains why Mr. Dougall is not here. Mr. Gordon left Sydney for Ottawa, but Mr. Dougall held him over in Montreal to check the costs with him inasmuch as they were not ready to present them to-day.

Mr. ROSS: Do you know when they will be here.

Mr. ELKIN: I do not know. I just arrived when Mr. Dougall telephoned me that he had telegraphed to Dr. Steele.

Mr. COWAN: That is the most satisfactory statement we have had so far. If there is no evasion and the papers are to come through, I am prepared to give them all the time that is necessary.

The CHAIRMAN: Would it not be a reasonable policy for the Government to pursue to assume that the company is acting in good faith? I have not seen anything not received any message that would lead me to assume that they are not. I think it would be good policy for us to assume that they are acting in good faith, until we learn something to the contrary.

Mr. Ross: I think we had better telegraph them and jack them up a bit anyway.

The CHAIRMAN: There can be no objection to wiring them.

Mr. Ross: Had we not better go on with another witness?

Mr. MCKENZIE: Here we are told by one of the Directors, who is in touch with the Vice-President, that they are getting ready as fast as they can. I think it would be well to get in touch with Mr. Dougall and tell him there is no time to be lost. The books are in Montreal, and they are getting them ready and will be here.

The CHAIRMAN: Mr. Maharg, will you take the Chair? I find it necessary to attend another meeting at 11 o'clock, and I would be glad if you would take the Chair in my absence. Perhaps I had better swear the witness before I leave.

ALFRED DION, called, sworn and examined.

(Mr. Maharg; assumed the Chair).

By the Acting Chairman:

Q. Mr. Dion, have you prepared a statement to present to the Committee, or do you just wish to make a verbal statement?—A. I did not know just what you wanted, but I have a few notes to refresh my memory, and if you will ask questions, I will try and answer them.

Q. First of all, what is your position?—A. I am the General Manager of the Ottawa Gas Company.

The ACTING CHAIRMAN: Gentlemen, you have Mr. Dion here before you. If there is any information which you wish to get, you can now question him.

By the Acting Chairman:

Q. I understand, Mr. Dion, that you are engaged in the manufacture of coke, and production of gas in the city of Ottawa?—A. Yes.

Q. That is rather an important matter which has been before the Committee, and we are anxious to get what information we can in respect to it, as to sources of supply, and the costs of producing coke, and by-products, and of gas and so forth. Possibly you might give an outline yourself, which would start the inquiry and get it under way.—A. We manufacture gas. That is our main object. We get coke as a by-product. We are buying Pennsylvania as being more suitable for gas making.

By Mr. Cowan:

Q. Anthracite coal?—A. No, bituminous. We are getting that coal from two districts in Pennsylvania, we attempt to get coal with a high volatile content. This coal is carbonized here and we get coke as a by-product which is sold in Ottawa to bakeries—

Q. To whom?—A. Bakeries, and a few other commercial establishments, but the bulk of it is sold for domestic use.

Q. Do they use it in their ranges, base burners, furnaces or what?—A. It is used in cooking ranges, and is used in furnaces for house-keeping. It is used practically for any purpose where anthracite could be used. There has been a very good market for it here. Until this year, we never had enough, we always ran short in the middle of the winter; we could not supply the demand. We sometimes had to get some from Montreal, where they seem to have an oversupply, and they sold it here, but Montreal is now selling all they can make, and we cannot get any more from there, but last winter was a mild winter and we did not run short. That was the first winter for a good many years when we were able to supply the demands. Gas is not used for fuel to a very large extent. It is used for cooking. That is the bulk of our business, but for heating the air it is not used to any extent. The gas is used for cooking mostly, and to some extent for hot water, and a few industrial uses, but not a great deal that way. We cannot place any cost on our coke. It is one of the by-products of gas.

[Mr. A. Dion.]

We price it usually from, one dollar and a half to two dollars below the selling cost of anthracite—the retail cost—and at that price we find a very ready market for it, the idea being to get what we can; all the competitive conditions of the market will allow for our by-product, and get the balance of our revenue from our gas. That is, out of what we get for our by-products we tend to reduce the price of gas per thousand feet. We do not figure on the coke cost, or what the tar cost was. I know what the coal costs, and what we get for the coke and the tar and the ammonia, which are the three by-products; we have to make a price for gas to give us the additional revenue required.

Q. You have always used Pennsylvania coal?—A. Yes.

Q. Have you ever used Nova Scotia coal at all?—A. No. We have not been in the gas business very long. The Gas Company is an old one, but it was in other hands until a few years ago, and as far as I know they never used Nova Scotia coal. Since I have been connected with the management we do not use it. I have made some inquiries from other Gas Companies, and the result was not such as to encourage us to use it.

Q. The result was not what? Was it a matter of price?—A. The results of these questions. The price was one thing; it had to be trans-shipped at Montreal,—re-handled there from the ships into the cars. Then, too, the coal was said to contain too much sulphur so that the cost of purifying it was very considerable.

Q. We are told here that there are several classes of coal there, some of which may contain a great deal of sulphur, and others are very good for coking purposes. Evidently you are under the impression that it is all of a high-sulphur content?—A. I got my information from the Montreal Company.

By Mr. Cowan:

Q. Is that correct, that it is all sulphur?

By Mr. Chisholm:

Q. What percentage of sulphur is in the American coal?—A. The coal we use is less than one-half per cent.

By Mr. Douglas (Cape Breton):

Q. I suppose it is slack coal you use?—A. What is called three-quarter lump. Slack coal is cheaper but it packs too much in the retorts. We cannot use it very well. You have to have some considerable portion of lumps in it to use it properly in the retorts. One thing they told me about Nova Scotia coal was that the coke would be inferior, and we get a good deal for our coke and we have to use a good quality of coal.

Q. You do not know anything about it personally—only what you were told?—A. I do not know anything about it as a gas-making coal. The only reason I did not try to investigate very far was because there was no object to be attained. We did not think we could gain anything even in the price.

Q. If you could get it as cheaply or at the same price as the Pennsylvania coal, you would be glad to make a test?—A. If we could get it cheaper, and the coal being equal, we would be very glad to try it.

MR. CHISHOLM: You were suggesting something, Dr. Cowan,—did you not mention something about the coal down there?

MR. COWAN: I do not know, what was the question?

MR. CHISHOLM: You were asking the question if all of our coal down there had a high sulphur content. I say emphatically, no.

MR. COWAN: Just as I am sitting here, again it is impressed upon my mind that Nova Scotia coal has—I would not say lost its reputation in Ontario—but evidently there is a wrong impression all over here in regard to it. I do not know why.

[Mr. A. Dion.]

WITNESS: There is an impression amongst the gas people whom I meet, that you cannot consider Nova Scotia coal anywhere west of Montreal.

By Mr. Douglas:

Q. That is, on account of the price?—A. As a matter of price.

By Mr. Chisholm:

Q. But not on account of the quality.

By Mr. Cowan:

Q. There is a prejudice against Nova Scotia coal which is ill-founded, and we want to try to remove that impression as far as we can, but every person from Ontario seems to have the idea that Nova Scotia coal is an utter impossibility. Now, from evidence we have got here, Nova Scotia coal is an exceedingly good coal; it does not contain many impurities, and there is a possibility of delivering it commercially in this district?—A. There was a time when we were very short of coal that we tried to buy anywhere we could. We were afraid of a shut-down. We were running very close. At that time many gas companies found it difficult to buy Nova Scotia coal even at a high price. We could not get it.

By Mr. Chisholm:

Q. You made the statement, Mr. Dion, that the impression is about that you cannot take Nova Scotia coal west of Montreal. What do you mean by that?—A. On account of the price.

By Mr. Douglas (Cape Breton):

Q. What does the coal which you get cost you?—A. To-day it costs nine dollars and a half, laid down.

Q. Laid down at your plant?—A. Yes.

By Mr. Cowan:

Q. Nine dollars and what?—A. Nine dollars and a half, about.

By Mr. Douglas (Cape Breton):

Q. Laid down at your plant here in Ottawa?—A. The freight rates have increased a good deal.

Q. That is a net ton?—A. Yes.

Q. Is that Canadian funds, or American funds?—A. American funds for the original price of the coal at the mines and on the American portion of the freight. That is included.

Q. That is included?—A. Yes, the exchange is included.

By Mr. Cowan:

Q. You said you had been getting coke from Montreal to fill in when you had not enough?—A. I did at one time.

Q. Do you know whether that coke was manufactured out of American or Nova Scotia coal?—A. It was made from Virginia coal.

By Mr. Douglas (Cape Breton):

Q. You are using Pennsylvania coal?—A. Yes.

By Mr. Cowan:

Q. Is this coke hard on the furnaces or stoves where it is in use, do you know?—A. Well, I say not, but a lot of people think otherwise. There is a general impression among people that the use of coke will burn out grates and furnaces.

Q. You have not found it so?—A. We have denied that, and a great many people have been using coke for a great many years without trouble. It is a strange thing that there is an impression all around among people that have not used coke, that if

[Mr. A. Dion]

you use coke you will burn up your stoves. My own theory is that you can burn out your stove with any kind of fuel if you get it to a high enough temperature.

Q. There is not doubt about that?—A. If you bring it up to a white heat you will burn your stove. The reason why you might burn your stove quicker with coke is that it needs much less air than for instance anthracite, and if you give it as much air as you would some other fuel, you get too hot a fire, but if you keep your temperature down it is just the same as any other fuel.

Q. These wrong impressions they have here have been fatal, I am afraid to business, and have not been to the benefit of the Ontario people. We find Ontario is afflicted with that more than any other part. They evidently want anthracite, and nothing but anthracite through here, and are paying a sweet price for it. There is great objection to bituminous coal for the house, on account of the dirt and smoke. If we could make enough coke, either through gas companies or through coke ovens—the first object is the making of coke—if we could make enough coke to take the place of anthracite, and we could have a sale for the by-products produced in making it, the objection to the bituminous would be removed. There should be sale enough for the by-products?—A. If you are making coke as a by-product you could make a good deal of gas that you could dispose of. I think it could be sold. For instance if there were a coke oven plant in this vicinity making coke, we could buy their gas, and probably would, rather than build expensive additions to our gas works, and so on, but the point is that if you coke your coal and you can sell the by-products, you are getting more out of the coal than if you burn it in the furnace in the first place.

Q. That has been proved conclusively, so that it would really be a profitable thing to do?

By the Acting Chairman:

Q. The out-put for the coke is controlled entirely by your market for gas?—A. Yes, exactly.

Q. Do you get your coal direct from the mines in Pennsylvania?—A. Yes.

Q. It is not re-handled between here and there?—A. No.

Q. That is a long distance, and there would be a high freight rate on that coal?—A. The freight rate is nearly \$5.—\$4.86.

Q. And that does not include the exchange you have to pay on the American dollar. It is \$4.86 you say?—A. I think that is that just now, and then there is the duty.

Q. 53 cents?—A. And then there is the exchange.

Q. Exchange on the price you have to pay at the mine?—A. Yes, and on the American freight. It brings it up to over \$9.50.

Q. Would I be asking something I should not know if I asked you how much it costs you at the mines? You have got it pretty nearly in the statements you have given. You say \$9.50 and \$4.86 with freight and duty and exchange added?—A. That represents a cost at the mines of about \$3.50, a little over \$3.50, but that varies. We cannot make a contract for a fixed price. All contracts are subject to labour conditions, and so forth, so that we cannot count on the present price, but the present cost represents about \$3.50 or \$3.55.

Q. That is last year?—A. For the present. It may not be so much next spring.

Q. How was it last year?—A. Oh, part of last year it was as cheap as that, but part of last year it was a great deal more than that. In the latter part of the year prices went away up. Last fall, at the end of last summer, we were paying higher prices.

Q. Could you tell us what you paid for it before the war, in 1913?—A. We paid as low, I think, as \$2.27. I think it went as low as that.

Q. That is at the mine, in 1913?—A. 1912 and 1913.

[Mr. A. Dion.]

By Mr. Douglas:

Q. Your cost at the mines was \$3.55?—A. About that.

Q. Freight rate?—A. \$4.86.

Q. And 53 cents duties?—A. Yes.

Q. Make the figures as exact as you can?—A. Well, make it \$3.50 at the mines; that is safe, I think; \$4.86 and 53 cents; that is \$8.89, and the difference of 61 cents is taken up by exchange. I think that is right. Anyway, \$9.50 is the price.

Q. That is on cars at your plant?—A. That is on cars at our plant.

By Mr. Cowan:

Q. You deal with the American Mining Company direct, or through a local agent?—A. We buy direct. We make that contract with the miners.

Q. What is your consumption of coal in a year?—A. Well last year it was 25,466.

Q. And about coke—how much coke would you manufacture last year? How much would you sell here?—A. 16,000 tons roughly.

Q. That is pretty good evidence that coke can be burned here satisfactorily. People in Ottawa are not such fools that they would buy the stuff if it was not worth buying?—A. Coke is a good seller, no trouble about that. We have customers who have used it for over fifteen years, and who have used nothing else, and come back for it.

By the Acting Chairman:

Q. If you put in a plant for coke as the main object, do you think it could be made profitable?—A. I hardly know how to answer that. My impression is yes. From what information I have got, from what I hear, that it could be made profitable.

By Mr. Cowan:

Q. The city of Toronto must be a large consumer of gas and by-product?—A. Toronto makes thirteen times as much gas as we do.

Q. Do you know anything about what coke they produce?—A. They do not produce coke in the same proportion, because nearly half of their gas is water gas. There are no by-products. Take 16,000 tons, and take thirteen times that, 208,000, and divide that by two; Toronto must produce and sell about 100,000 tons of coke; Montreal a little less than that. The output in Montreal is about ten times that of Ottawa. That is the latest figure I have.

By the Acting Chairman:

Q. You sell your coke at \$1.50 below the price of anthracite?—A. Yes, or \$2. Just now it is three times less than the anthracite.

Q. And as to British thermal units, you do not know how the coke and anthracite compare?—A. About the same.

Q. And really they are getting \$1.50 of heat for nothing?—A. Yes, if the coke is burned efficiently you get the same amount of heat from a ton of coke as from a ton of anthracite.

Q. Of course it is minus the clinkers, and there is nothing of that kind?—A. Yes, and hardly any ashes—very much less ashes in the coke.

By Mr. McKenzie:

Q. In talking about the effect of sulphur on gas producing coal, what is the deleterious effect of sulphur on gas producing coal?—A. Well, it comes into the gas in the form of sulphurated hydrogen, and we must not have any trace of it in the gas, or we are fined by the Department of Trade and Commerce, so that it has all to be removed out of the gas before it goes out. Now the cost of removing the sulphur contents, or purification as we call it, depends entirely upon the percentage of

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sulphur. The capacity of the purifying apparatus, its size and cost, depends upon the amount of sulphur you have got to handle, so that if the percentage of sulphur is a little high, the cost of purification, the operating cost, and the overhead cost, owing to the cost of plant, is increased greatly.

Q. In regard to taking sulphur out of coal that is used for metallurgical purposes—do you take sulphur out of gas in the same way?—A. I do not know what way you use it in the other processes, but we take the gas oxide of iron, and we get the oxide in the natural state from Three Rivers, Quebec. I believe it is the only place where it is dug out of the ground in a natural state.

Q. In a report here of analyses made of Nova Scotia coal, I see that in some places they have the reserve mines coal. This book I have in my hand says it is a percentage of 1.18 of sulphur. Would you be able to tell the Committee the extra expense of treating one per cent as compared with 1.8 coal for gas purposes?—A. It would be hard to say off-hand, but I would say this, that you would need an apparatus nearly double the size of the first one, and you would have to handle the equivalent quantity of oxide which has to be changed frequently. This oxide has to be emptied out of this apparatus as soon as it gets saturated with sulphur and it has to be revived. It has got to be thrown up into the air by hand to let the air get out and absorb the sulphur out of it so that it can be used over again, and that is a great deal of labour. If you have 2 per cent of sulphur you must have twice as large an apparatus as when you have 1 per cent. You must use twice as much oxide and you must handle that quantity. I will say, therefore, roughly, that it costs nearly in proportion to the sulphur contents.

Q. Would it not depend largely upon the absorbing qualities of the material you are using?—A. If you use the natural material, it is all the same. There is only one place I know of where we can get it, and it is always the same. Now, in some places in the States they use artificial oxide, which is more expensive.

Q. What I mean is this: If you are putting oxide there in the coal, one per cent, and the application of the oxide will take out the sulphur, would it not by the same application take out 1.8 per cent as well? It would take all there is. It would not be any more expensive.—A. Here is the point. This oxide will take a certain percentage of sulphur, when it is said to be saturated, and cannot take any more.

Q. That is just exactly what I mean. If the absorbing quality or power of that material is enough to take not only one per cent with one application but 1.8 per cent as we have here, it would not be any more expensive—if it took all there was.—A. Just because of this—if so many cubic feet of gas contained so much sulphur, and that quantity of sulphur just about saturates the outside in a certain purifier, there is a certain amount of oxide in a certain purifier, that will absorb so much sulphur—it will take so many cubic feet of gas to produce that sulphur; therefore, you see, the capacity of this purifier is equal to any given amount of gas. Now, if you introduced a gas with twice as much sulphur in it, it is evident the purifier will only handle one-half the quantity, because one-half the quantity will saturate it, and therefore I would have to have another purifier and divide the gas between the two and only pass half as much gas in each, because one contains as much as two cubic feet of the other, therefore I say the gas would be practically in proportion to the sulphur content.

By the Acting Chairman:

Q. The extra cost comes in from the purifying from iron oxide?—A. That is one thing, and the other is the extra cost of the apparatus. If we have to double our plant, there is a certain additional charge on that.

Q. But it does not cost you any more for iron oxide? You can use it and re-use it?—A. Not for ever. We use it five and six times.

[Mr. A. Dion.]

By Mr. McKenzie:

Q. Have you got any assays of this coal which you get from Pennsylvania?—
A. Oh, yes, but I have not got them here.

Q. The very best you get has one per cent?—A. It goes below one per cent. I cannot give you the exact percentage here. There are all kinds of coal in Pennsylvania. Of course, the slack coal is best suited for gas-making. There are only a few mines in Pennsylvania which produce that coal.

Q. I want to get down to the question of what you get out of a ton of coal, in its constituent parts. You say tar, ammonia, and coke. Are those three elements—
A. Those are the three by-products. We get about sixty-one per cent of the weight of the coal we use back in coke—or sixty-three per cent.

Q. Sixty-three per cent becomes coke?—A. Yes. We carbonize a ton of coal and get sixty-three per cent of that as a return in coke. We get about ten gallons of tar, and we get about three and three-quarter pounds of ammonia.

Q. Well, now, you say a ton of coal in its raw state costs you nine dollars and a half?—A. Yes.

Q. That is a safe price to take?—A. Yes.

Q. That is what it is costing you now?—A. Yes.

Q. Now, what value do you get out of that in a marketable commodity, apart from the coke?—A. Apart from what?

Q. Apart from the coke?—A. From the coke?

Q. Yes.—A. The tar brings in very little; it is worth about four cents a gallon.

By Mr. Chisholm:

Q. How much?—A. Four cents.

By Mr. Cowan:

Q. A gallon?—A. Yes. It is liquid tar when we get it. The solid tar that we get is that gas-tar boiled down, but when we produce it, it is liquid.

Q. And what value of gas do you get out of a ton?—A. We get between fourteen and fifteen thousand cubic feet.

Q. Converted into dollars and cents, that would mean what?—A. We would get somewhere over twenty-two dollars.

Q. That is, twenty-two dollars of gas and about forty cents in tar, is that it?—
A. At four cents a gallon?—A. Yes, about that.

Q. That would be twenty-two dollars and forty cents, apart from the coke? Now, what would you have to sell your coke at to compete with anthracite?—A. Well, we make a practice of pricing it at about a dollar and a half to two dollars below the retail price.

Q. They are selling anthracite here now at sixteen dollars?—A. Yes, we sold it at fourteen, and now we are selling it at thirteen dollars, merely because we need the room, and we want to make a rush, so we are making a cheap sale, but usually it would be about two dollars below the price of anthracite. I do not know whether it would stand more than that. I know we have had some difficulty in selling it on those conditions.

Q. Now, I do not know whether it is fair to ask you, Mr. Dion, or not, but supposing you had a keen competition in the sale of your coke—A. Yes.

Q. What do you think a man could make a fair and reasonable profit selling this coke—for how much would he have to sell it? What is the lowest price you think you could sell coke for to-day under present conditions, producing it as you do, and making money—making a fair profit?—A. Our practice has been, as I said, to get what we can for coke in competition to make the return of the revenue required on the gas. If we had to sell coke cheaper, we would have to increase the price of gas. What we get out of the by-products helps the gas consumer.

[Mr. A. Dion.]

Q. Supposing there was no coke at all—would not the price of your gas likely be the same?—A. If there was no coke at all?

Q. Yes.—A. We would have to increase the price of gas. We get a big revenue from coke.

Q. But would you make money out of this twenty-two dollars and forty cents, even if there was no coke?—A. Oh Lord, no. I could show you our annual statement for last year, and you will find we had hard work to pay six per cent.

Q. This nine dollars and fifty cents is converted into twenty-two dollars and forty cents, is it not?—A. I gave you the price of coal as nine dollars and fifty cents. That is not, of course, the cost of making gas.

Q. I quite understand that, Mr. Dion, but there is a fair margin there—a considerable margin between the price of coal and the price of the finished article.—A. If we had to reduce the price of coke materially, we would have to go out of business, or else put a price on gas which would stop people from using it.

Q. But you had no stabilized sale for coke? You are not really in that business? It is only a sort of a “side-show”?—A. Sir?

Q. It is a sort of a “side-show”—that is coke?—A. It is a very important “side-show.”

Mr. COWAN: Sixteen thousand tons is quite considerable “side-show.”

WITNESS: The revenue from these sixteen thousand tons allows us to sell gas at a price where people will use it. We cannot go much higher on gas now without losing business and a lot of it.

By Mr. McKenzie:

Q. What I am after is this: I see there is a very large field in Nova Scotia for making coke and selling it, if we can compete with the anthracite. I have no fear at all about the excellency of our coal for making coke.—A. If you are going in the coke business, you do not need to sell it any cheaper than we do. You ought to find a ready market for it. I mean, of course, retail; you would have to sell it a little cheaper wholesale.

Q. What rate would you have to pay on a ton of coke, supposing you send a ton of coke to Toronto, for instance?—A. I cannot say.

By Mr. Cowan:

Q. It is lighter than coal? It would be more bulky?—A. Very much.

Q. It would take more cars to carry it?—A. Yes. I had some data on that; it is about two and one-third times more bulky than anthracite.

By the Acting Chairman:

Q. How do you heat your ovens or retorts?—A. With coke. We use a certain amount of our coke for that purpose.

By Mr. McKenzie:

Q. Mr. Dion, do you know anything about the New England Gas and Coke Company, of Boston?—A. Yes.

Q. You have heard of the name?—A. Yes.

Q. I am making this statement as it came to me, that for a year they started to order our coal—they commenced in the Whitney days; Whitney came to Cape Breton and he built up the Gas and Coke Company in Boston—it is now called the Edward Gas Works—A. Yes.

Q. Do you know anything about the Halifax Gas Company?

Mr. COWAN: That is just what I was going to ask you.

WITNESS: No. I just know of them. I never saw their plant. I know of them—that there is such a company.

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By Mr. McKenzie:

Q. There is such a company, and they are using Nova Scotia coal.—A. There was a paper read, I think, last year at the Convention of the Canadian Gas Association on "The Purification of Nova Scotia Coal," which deals with the whole problem of sulphur, and how to get rid of it, and so on. If I can find that paper, it might be of very great interest to you. It is written by a man in Halifax connected with the company.

Q. I think we would like to have that.

By Mr. Chisholm:

Q. Do you know the man's name?—A. I cannot think of his name now. I can loan you the book. I have the proceedings, I think, of the whole meeting, with that paper in it, and it shows exactly what it means to take care of this extra sulphur.

By Mr. McKenzie:

Q. Do you know anything about the relations between steam-making and gas-producing coal, as to the necessity of fuel coal?—Would there be any relation between them?—A. No, of course a large sulphur content is objectionable in steam-making, merely due to the effect on the iron and steel, and on the boilers, and there are some coals from Pennsylvania which we have used for steam-making which we could not use for gas-making, because they do not contain enough volatile matter. You see, it is gas we want.

Q. Coal up to five per cent is used for metallurgical purposes. It is not very desirable but it is used right up to that per cent in the production of steel.—A. It is, eh? I take it that in considering the use of Nova Scotia coal for gas-making, you would have to take the whole cost, the cost of the coal and the cost of the transportation and the cost of purification in bulk, and if the final result was satisfactory, I do not know why Nova Scotia coal might not be used, but you have to consider the question of purification as part of the cost.

By Mr. Chisholm:

Q. Is the plant you use an expensive one?—A. It costs about nine hundred thousand dollars.

Q. How much?—A. Nine hundred thousand dollars.

By Mr. Cowan:

Q. That is your entire plant?—A. That is our producing plant, yes.

By Mr. Chisholm:

Q. Supposing you were coming in to establish a business of this kind, what could you build a plant for? How much would it cost you to build a plant that would double or treble the output?—A. You have reference now to this sulphur business?

Q. Yes, that is what we are talking about.—A. You would not have to increase your whole plant—just your purifying plant.

Q. What does a purifier cost?—A. I cannot say offhand. I have not got those figures.

By Mr. Cowan:

Q. Is this a very expensive thing?—A. It is expensive, but I do not know what percentage it would bear. I do not suppose it would bear—oh, certainly not more than fifteen per cent. I think that is high—of the whole plant.

By Mr. Chisholm:

Q. Fifteen per cent?—A. Yes.

Q. In your judgment, if you were coming in.—A. You might have to double that.

Q. You would have to double that?—A. You might have to double that.

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By Mr. McKenzie:

Q. Of course, Mr. Dion, when I talked about five per cent sulphur, I meant before they treated it. They grind that coal and put it through a washer, as they call it, and treat it so that they get it down to sufficient cleanliness so as to be able to use it. I did not intend of course, to say that coal of five per cent sulphur could be used for metallurgical purposes, but I think perhaps it could be so treated that it could be finally used for that purpose.

The ACTING CHAIRMAN: Are there any further questions?

Mr. COWAN: There is one thing I must say again: That it does seem to me, from the evidence given, that there are about a dozen things all combined to form a wrong impression here through this section of the country in regard to Nova Scotia coal. They are almost all of them minor things, and they can easily be removed, and it seems to me that somebody from either the Nova Scotia Government or somebody in connection with the Dominion Government should appoint a commission to get busy and rid this country of those impressions. Those impressions are here and they are wrong impressions.

WITNESS: If I were interested in Nova Scotia coal and wanted to sell it, I would organize a little educational campaign and have the press all over Ontario take it up.

Mr. COWAN: That is one thing I am going to try to impress upon the committee when we are discussing these matters, and that is the necessity that something be done. I do not know whether we can do as the Alberta Government is doing or not, but these wrong impressions should all be removed, and I am satisfied they can be.

The ACTING CHAIRMAN: I suppose one of the reasons is that the Nova Scotia people have had no difficulty in selling their coal until recently. They have always had a market for their output, so why should they undertake the expense of a campaign when they had a sufficient market?

WITNESS: I attended an investigation in Montreal before the Public Service Corporation. They were looking into the price of gas in Montreal, and the Purchasing Agent of the C.P.R., Mr. Britt, gave evidence that he could not get a pound of Nova Scotia coal. He said he would like to get a lot of it, but could not get it, that there was no coal coming up the St. Lawrence.

By Mr. Cowan:

Q. How long ago was that?—A. It was about a year ago.

Mr. CHISHOLM: The conditions were unique at that time.

Mr. COWAN: It is not a case of their being able to sell their coal. Probably they are selling all the coal they are now producing, but as I understand it, they can produce more than they are now doing, and the additional production would add a great deal to the prosperity of Nova Scotia, and increase the population, and in addition would save us from paying the horrible exchange which we now have to pay to a competing nation, so it is to the interests of everybody that the output shall be enlarged.

Mr. CHISHOLM: I quite agree with you that that should be done, but let us not forget that this committee is here for the purpose of finding out about the future fuel supply of Canada, and for what? For the purpose of supplying the needs of the province of Ontario. Would it not be a very good policy on the part of the people of Ontario to take a hand in this thing and co-operate and find out just exactly what the condition of coal is. They need the coal, they should do something on their part to find a cheaper coal than they are getting, and to find a supply of coal upon which they can depend. It should not be left with the mines of Nova Scotia to go around Ontario and advertise its coal. I would say there should be co-operation. We are putting evidence before them, and getting all the facts; we are endeavouring to bring witnesses here to show them what kind of an article we have, and would it not be a good

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dea for the people in Ontario to look into this? There should be an educational campaign in the province of Ontario amongst the people themselves, just as well as in Nova Scotia. It is hardly fair to say that the miners of Nova Scotia should come into the province of Ontario to advertise their coal. The people of Ontario want coal, and they want it as cheaply as they can get it. It is a question of whether they can get a good article at a reasonable price. Why do they not go out and try to find it? That is my view.

Mr. COWAN: I think you will find that as a usual thing the party who has the goods to sell is the one who has to do the rustling.

Mr. CHISHOLM: Not always. When I want to get a good rug, I would go around to try and find where I could get it.

Mr. COWAN: That does not usually apply in commercial life.

By Mr. McKenzie:

Q. You have seen lots of Nova Scotia coal?—A. Yes.

Q. You have burned it?—A. Yes.

Q. And it gave a splendid fire?—A. Well, I have only used one Nova Scotia coal, and I think it was splendid. That was the old Sydney Mines.

Q. You have lived in Nova Scotia?—A. Yes.

Q. And have lived in Cape Breton?—A. Yes.

Q. You have been there several winters?—A. Yes.

Q. I remember when you lived there. You were using the old Sydney Mines coal in your house?—A. Yes.

Q. And found it a good article of fuel?—A. I think it was very good fuel.

Mr. MCKENZIE: There you are, Dr. Cowan.

Mr. COWAN: I think we have yet to hear anybody come before this committee and make any objection to Nova Scotia coal—there is not one. My own opinion is that we have far better bituminous coal in Canada than you have in the United States. It may be you can select some over there better for gas purposes, but taking all around, I believe our Canadian coals are superior to the American coals as I see it here.

Witness retired.

Mr. CHISHOLM: Mr. Hudson is here this morning.

Mr. MCKENZIE: I submit that we should have a fuller committee when we are hearing Mr. Hudson.

Mr. HUDSON: I could go over the matter, and I think this map will give a good explanation of the situation of the coal trade at the present time. I could easily take you from Nova Scotia to the coast, and explain what it is. I have a copy of this plan, not coloured, for each member of the committee.

Mr. CHISHOLM: I think it would not be proper to disconnect Mr. Hudson's evidence, and there is a great deal I wish to get from him myself.

The CHAIRMAN: If we are going to take it as official evidence, I think we had better swear him, the same as the other witnesses.

JOSEPH G. S. HUDSON: Called, sworn and examined.

By the Chairman:

Q. What is your occupation?—A. Mining engineer; holder of certificate of competency, Great Britain Underground Manager's Certificate, Nova Scotia Manager's Certificate, Nova Scotia Mines Act; had forty years experience in coal mining, entered on underground work when 17 years of age in the Pictou coal mines; then went to England for three years and obtained first-class mine manager's certificate;

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then returned to Nova Scotia. Have been mine manager for 25 years; was two and a half years in the Fuel Agent's office of the Canadian Pacific Railway, Montreal; general inspection and investigation work relative to coal and coal mining.

Have been 12 years in the Department of Mines, Ottawa; worked on coal and coal mining investigations, coal mine accidents, fuel problems.

Was technical adviser to Mr. C. A. Magrath, Fuel Controller for Canada from the date of his official appointment until the close of his office; now inspector of explosives, Department of Mines.

Have been over and inspected all the principal coal fields in Canada and have personal knowledge of the mining of coal in Nova Scotia, New Brunswick, Saskatchewan, Alberta and British Columbia, having been in the underground workings of the larger collieries in all the provinces.

In April, 1917, was appointed to make investigation as to the shortage of coal in Canada, before Fuel Controller was appointed.

I have prepared this map for the information of the committee in this way to show the whole story of the coal trade in Canada. If you start down at Nova Scotia, these numbers on the map represent millions of tons and all these lines going through show the districts. I have drawn a base line through the country, so that it takes individually each of the provinces. Starting from 1913 we come back to 1920, and I may say that all these columns are scaled exactly on the same scale, so that they all represent exactly what they are. This blue line at the bottom is the coal sent to the United States, 524,000 tons, from Nova Scotia.

By Mr. McKenzie:

Q. What year?—A. 1913. And the coal sent to the province of Quebec that year was 2,456,415, and the coal consumed in Nova Scotia 2,910,000. The total of these figures comes to 7,890,000. The war started in 1914, but did not make very much difference as you can see from the columns. In 1915 we released almost the same number, 7,463,000, and then when the war came on our men started to go over, and I may say right here that there is no place in Canada so hard hit as the Nova Scotia coal trade by the war, for this reason, that there were over 6,000 miners enlisted and went overseas. The Government commandeered all the transportation vessels of the companies in Nova Scotia, and at the same time they wanted all the coal they could get. The Fuel Controller went down to Nova Scotia, and insisted, and told the men that they had to have the coal and it was just as important that they should have the coal as that they should have the men. I make the statement from the miners' standpoint, that when anything like the war happened, the miner always jumped in. He was the first man to do something, and it happened in this case, and we have less production and less men to do the work. Then we came down to a low point in 1919, to 5,720,000 tons, and in 1920 it came up to 6,395,000 tons. I have not been able to cover that in this column I am pointing to because I have not the distribution, but this shows how it has gone down, and you will allow me to make one comparison. In the year 1914 Nova Scotia used 2,203,336 tons, percentage of sales 35.7. In 1920 we used 2,445,195 tons or 48 per cent. But that is not exactly what I am trying to show. That largely accounts for the coal. I am giving these figures to show how the trade has been turned, and the difficulties Nova Scotia coal operators have had in maintaining that coal trade in Quebec. In 1914 Nova Scotia sent 2,381,582 tons up to the province of Quebec, what is known as the St. Lawrence route, and that trade would equal 38.6 per cent of their total sale. In the year 1920 there was 240,701 tons of Nova Scotia coal came up to Quebec, which represented 4.7 per cent of their total sale. So that you can see how that is going on. You will see here on the map, from 1913, in that column I am showing you, the bituminous coal which was imported to the province of Quebec in that period. See what it is in 1918. It has gone up to 4,299,000. So that has all come in competition with Nova Scotia coal in the province of Quebec, in that market

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known as the St. Lawrence market. If you come to the province of New Brunswick you will see the position in these small blocks. Last year it was 161,000 tons, and it has never reached up to more than 250,000 tons. It is a very small production. It is used locally. The area of coal in New Brunswick is quite an extensive area, but the seams are very very thin. They run from 12 inches to 28 inches, and they lie very close to the surface. Most of the mining down there was 32 feet from the surface. A great deal of it was on the surface, six or eight or ten feet of overburden, and that is taken out with a steam shovel, and put on a car. Now these columns referring to Quebec show what is used of American coal, plus what is used of the coal from Nova Scotia. Now we come to the province of Ontario. These columns representing the amount of coal imported do not represent exactly the quantity of coal used in the province of Ontario, because a great deal of coal goes to the head of the lakes, Jack Fish Bay, the Sault, Port Arthur, and Fort William, and they are distributed further west, generally not any further west than the first divisional point in Saskatchewan. So that these columns of different colours here show what has gone further west out of Ontario, represented by these lines which correspond to the figures in these other columns.

Then we come to Saskatchewan. Saskatchewan did not show very much reduction last year, 349,000 tons, but there is a very great possibility with the coal fields in Saskatchewan, Taylortown, Bienfel, and Pierce Rochelle. There are great possibilities that the northern section of Saskatchewan is going to yield very good coal, and I notice in the paper yesterday that the Saskatchewan Government sent up an expedition to look into it. Now we come back to Alberta, of which we have heard a great deal very lately.

Coming down you will see the coal in Alberta is increasing very rapidly and that is very largely due to the very aggressive policies that the Provincial Government of Alberta have taken to push their coal on what they call the natural market, which is east of the eastern boundary. They do not claim to send so much into British Columbia on account of it being a mountainous section and taking a very high freight rate. From figures which I have gathered, we learn that in 1913 they have a production of four million tons, while in 1920, they had a large production which came up very close to 7,000,000 tons—6,858,000 tons.

They are sending a small portion of their coal into the United States, but it is just going over the line and is represented by this small column here (indicating). These red lines on the chart represent Canada's coal which is being used in Canada, Manitoba and part of Saskatchewan, and the green lines represent what is being used in their own province.

By Mr. Cowan:

Q. The red line represents what is used in the province of Alberta?—A. Yes. Here again my figures are for 1915, and you can see that the amount is considerably increased. I have not been able to get the figures for the year 1920, so I have not entered them in this production column.

Out in British Columbia, we have not very much increase. Their coal trade fluctuates to a certain extent. These blue lines on the bottom of the chart show where the coal goes in the United States. There is a large amount of coal goes there, but considerable of it is bunker coal, and they have sent a great deal of it to Alaska. That is the most productive coal which they have, and they have increased up to two million eight hundred and fifty thousand tons. There is one question that I do not think has been touched upon, and that is this: In the year 1913, the International Geological Congress, which meets every three years, was invited by the Dominion Government to come to Canada. Each year, before their Congress they choose one subject for discussion, and in 1913, when they were invited to come to Canada, they choose as their subject "Coal." This table (indicating) was made up on the metric ton which does not differ very much from our ordinary long ton. The tables are made up in two

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ways. That is the actual coal reserve, and the possible coal reserves which are thought to be in existence as determined by a geological survey. This gives the area in square miles, and in metric tons. I do not think, as far as I can recall, that we have on the record the amount of coal available in each of our provinces, and if the committee would like, I will read it as I have the table prepared from Mr. D. B. Dowling's of the Geological Survey book on this subject.

In the province of Nova Scotia, that includes Cumberland, Colchester, Pictou, Antigonish, Richmond, Inverness, and the Cape Breton land and submarine areas, including seams of one foot or over to a depth of four thousand feet, they have an area of one hundred and seventy-four and thirty one-hundredths and an actual reserve of 2,248,151,000, a probable reserve of 273.5 square miles, with a coal reserve of 4,891,817,000 tons. That is the actual known areas upon measurement for coal, of over one foot in thickness, to a depth of four thousand feet.

New Brunswick, of course, is very small, and they have not a very large area, but their coal runs from 22 inches down to about 18. In the twenty-two inch thick, they have an area of one hundred and twelve square miles, with a reserve of one hundred and thirty-eight million tons, in the seams eighteen to twenty inches thick, there are nine square miles—

By Mr. Chisholm:

Q. You said nine square miles?—A. Yes, it is a very small district, and their reserve there is only about thirteen million tons, or a total of one hundred and fifty-one million tons.

Saskatchewan, of course, has a very large area. The Belly River series runs from four to eight feet, the actual area is eighteen square miles, and the actual reserve one hundred and eight million tons, while the probable area is about seven thousand two hundred square miles with a total probable reserve of thirty-three billion eight hundred million tons. The tertiary coal is found in an area of about two hundred and eighty-eight square miles with a reserve of two billion, three hundred and four million tons, while the probable area is fifty-nine hundred square miles, with a probable reserve of twenty-three billion, six hundred million tons, this gives a total actual area of three hundred and six square miles, with an actual reserve of two billion four hundred and twelve million tons, with a probable area of thirteen thousand one hundred square miles, with a probable reserve of fifty-seven billion, four hundred million tons of coal.

By Mr. Cowan:

Q. Yes, and they have not even started to find it.—A. Well, that is there anyway. Alberta has a known area of twenty thousand three hundred square miles, with three hundred and eighty six billion, three hundred and ninety-two million, eight hundred thousand tons, with a possible reserve of fifty-six thousand three hundred and seventy-five square miles, and a total probable reserve of six hundred and seventy-three billion, five hundred and fifty-four million, six hundred thousand tons of coal.

MR. COWAN: That should last us for a year or two anyhow.

WITNESS: Yes. British Columbia has a very large area of coal, four hundred and thirty-nine square miles, giving over twenty-three billion tons of coal, with a possible reserve of six thousand one hundred and ninety-five square miles, and a possible reserve of over fifty billion tons.

There have been a great many questions coming up I have noticed of the difference between mining coal in Nova Scotia and in the United States. I do not think I can possibly go into the details very much, but I can give you some idea of it, because I mined coal in Nova Scotia for a great number of years, both in land and in submarine areas, and have gone through the hand-picked mines and also those where machines are used, and I have been down in a great many of the mines in Ohio. In Ohio there are large areas of coal down there, and they are lying most advantageously for the operators and have a very low cost for mining from the face of the coal where it is extracted, to the cars on the mine siding. The celebrated seam down there is

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known as the Freeport No. 6, it is more than six feet thick, and it lies only from ninety to one hundred and twenty feet below the surface. They have no gas, and no water, and they can run an electric cutting machine in there anywhere they like right up to the face and back again. Now, referring to Nova Scotia and Cape Breton mines: We have nearly eighty per cent of our reserve underneath the sea. Almost all coal there is away under the surface, and extends seaward, going toward the old coast-line, which we found was several miles out, so that it is very deep. In the Dominion No. 2, or Sydney Mines No. 1, I think those mines were 1,000 feet deep as against the Ohio mines, 100 feet deep. At Sydney Mines, they have gone down—sunk their shaft less than one-half mile from the shore, and then have gone about a mile and a half out to sea, so they are hauling that coal underground a distance of over two miles. Now, on that haulage question alone. Down in the Ohio mines on account of the large areas, and their levels, there is plenty of headway, and they can use a three-ton car in mining, which they call a "mine-car," whereas in Sydney Mines, they call it a "pit-tub," and it only holds about half a ton, so the hauling of one car in the Ohio mines means the hauling of six in the Sydney mines.

During the war I had to go down with Mr. S. A. Taylor, who was the adviser of Dr. Garfield, the Fuel Controller of the United States. It was his first visit to Nova Scotia. He had never seen a submarine or under-sea workings, and he said he had no idea that coal was mined under such conditions as he saw in Nova Scotia. At Sydney Mines we showed him that the cost of hauling a ton of coal from the face of the deeps, at Sydney Mines, to the top of the shaft was as much as the total cost of the whole production of some mines with which he was connected in Pennsylvania and Ohio.

By Mr. Douglas (Cape Breton):

Q. Will you make that a little clearer, Mr. Hudson? You said the cost of taking one ton of coal—A. I said the cost of taking one ton of coal from the face of the deeps in the Prince's Pit, that is Sydney No. 1, was actually more than the cost of mining coal in the mines with which he was connected in some sections of Pennsylvania—that the actual haulage was more than the total cost of production in Pennsylvania—some sections of it. Now, when it comes to a question of timbering, when we consider that one of the Labour members from Cape Breton instanced the Caledonian mines, now known as Dominion No. 4. The Caledonian was started at the surface, in 1862, and has been going continuously as a producing mine from that time onward, having total shipments of over two thousand tons per day in certain periods, and three thousand tons in some periods per day, so the Caledonian mine is one of the large mines. In some places it is over twelve thousand feet deep on an angle of six degrees, and in some places, from the face of the west level to the face of the east level, it is four miles. I cannot tell you the hundreds of thousands of tons which have been extracted out of that shaft, but it could be figured up and you could get some idea, but assuming that they are taking a thousand tons a day out of one shaft, you could imagine the amount of coal that has been removed from his mine.

Now, in Ohio, you can go down there and see any quantity of mines that are producing a thousand or twelve hundred or fifteen hundred tons a day, whose capital account does not reach one hundred thousand dollars for the whole outfit, that is, sinking the shaft, opening the mine, development, power plant, and all the buildings, whereas if you take one of the Cape Breton mines, such as Dominion No. 6, their capital account runs up as high as seven hundred thousand dollars before they even get one thousand tons per day; so you can see the large amount of money which has to be invested in comparison with the mines of the United States, and which adds materially to the cost of the Nova Scotia coal. Take, for instance, the coal area atictou—we will say, the Drummond mine. They were working down until a sharp

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time ago at a vertical depth of twenty-four hundred feet, so the amount of timber that had to be put in was tremendous to support their workings, and they have had to make a change on several occasions.

When you come to Alberta, you find in the province of Alberta nearly all the coal you can get, that is, coal that is known as domestic coal, or the old previous name of lignite—which was not a very good one—a better name is domestic. We have good mines at Taylorton, which are capable of producing up to fifteen hundred or two thousand tons per day. As regards transportation, that question is coming up more and more, and has been the cause of advancing the price of coal very much. The Dominion Government and the Provincial Government have undertaken the briquetting of Saskatchewan coal. They have developed that in one district, and they hope to go on and in a very short time make it an important factor in the fuel situation of Canada. They are claiming that they can carbonize that coal, and bring it up to a certain consistency by binding it in the form of briquettes, so that it will be equal in heating value to anthracite coal.

By Mr. Cowan:

Q. Before you leave that: There is a seam of coal there about twenty-five or thirty feet underground?—A. Yes.

Q. Do you know anything about the other seam that is reported to exist seven hundred feet underground—do you know anything as to the quality of it?—A. No, I have never seen it, but in all probability it will be a very high quality of coal, because the deeper you go the more pressure you will get on it, and it will probably be better coal than the coal which lies close to the surface. In Alberta we have the coal that you can get at easily. If you go in from the portal at Moosejaw and come through the Crow's Nest Pass coalfield, from Bemis right through to McGillivray Creek, taking in Hillcrest, Bellevue, Blairmore, and Colman, coming into the highest grade of bituminous coal—you find coal there which runs from seventy-five to eighty per cent fixed carbon, so that it makes extremely good steam coal, and out there they are using bituminous for steam purposes. Then when you get about seventy-five miles from Frank, you come into the Fernie coal district, which of course is in British Columbia, and then you have an extremely high-grade coal good for steam purposes. This Crow's Nest Pass coal is practically equal to the British Admiralty coal of South Wales; that is, the English people demonstrated or classified the anthracite coal as containing eighty-eight per cent of fixed carbon; they classified the Admiralty coal at from seventy-five to eighty per cent fixed carbon, the volatile matter, of course, being very small. Now, if you follow up through the Belly River formation, you get into the mountain section, where the pressure is much heavier, and you come to the Kootenay series which starts at Bellevue, and comes up through Sheeps Creek, and then there is the Mountain Park, and these other series which Professor Pitcher has explained to you. Take, for instance, the coal at Sheeps Creek owned by Mr. Burns. That coal is very nearly up to anthracite; it is not up to the eighty-eight per cent fixed carbon, but it runs up to about eighty-five per cent, so it is a very high grade coal, and the seams are very advantageously situated, because the Grand Trunk Pacific line goes right through there, so that from a spur line on to the other side of Edson, which is the divisional point down into the Mountain Park and the Cadomin field, then it is only about fifty or sixty miles until they come to the main line, and I think in the Cadomin there is a great deal of that coal which can be obtained by stripping, and then they have the same thing at Tofield, on the east side of Edmonton, which provides for an enormous supply of coal.

This point, however, must never be lost sight of in speaking of transportation. When you come from Nova Scotia or from Alberta, nearly two thousand miles away, you have coal in both provinces, but in the provinces of Quebec and Ontario, where you have about seventy per cent of your actual manufacturing going on you have two provinces that do not produce any coal. Now, the question of course is this: How far

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can we bring Nova Scotia coal up into Ontario and how far west can we bring it, and how far can we bring that Alberta coal down into this country to meet the west-bound coal. These figures (indicating) represent our imports at the present time, and they show that we are importing into Canada more coal than is actually being mined in this country. That is very largely the position in which we find ourselves. A large amount of manufacturing is done in Ontario and Quebec, where they have no coal, and it is a very serious question as to what would happen to the manufacturers—I am digressing a little in this—but it is a question what would happen to the Canadian manufacturers in the eastern provinces, if the United States stopped our coal supply, and in that connection I might say that we have enormous water powers in these two provinces, and I think if an investigation is made of the water power that could be developed, we would find it would very nearly equal the coal which is used in these two provinces, and we would not have to import so much coal nor send out such a large amount of money. I am not prepared to say how much we are sending out, but it must run over one hundred million dollars a year for coal, and coal rates at the present time, so we are coming to a point where it must be considered as to whether we can get Nova Scotia coal farther up against the competition of American coal, because you can rest assured that the American mine operators are not going to let go of these provinces, until they are compelled to. It is a most advantageous market for them. The coal imported to the head of the lakes is largely water-borne, and the railway companies have to make provision to get their coal in in six months in sufficient quantities to last them for twelve, and that brings up the question of storage and all the rest of it. This is a very advantageous market for the American operators, because they can send that coal up in the summer time when their own market is rather reduced, and they are having a slack time, so that they have the advantage of our Canadian trade here for the summer, and their own trade for the winter, and they are able to produce coal at the present time a great deal cheaper in the United States than we can here in Canada, for the reason that the fields are comparatively new there, they have tremendous territories to work on, they have very few mining difficulties such as they have in Nova Scotia, therefore, they are able to produce coal very, very cheaply. It is true they are taking all the cream off, and will pay for it very dearly some time, but not in our days, but their reserves are so enormously large, that they can afford to do that, and the American Government has not very much control over them, because as a rule they are privately owned interests.

By Mr. Douglas:

Q. Mr. Hudson, what percentage of the American soft coal production comes to Canada?—A. Very little. The normal production is about six hundred million tons of bituminous coal, and out of that we get something like fifteen or sixteen million, so that it is not a very large quantity.

Q. So it would be only about two or three per cent?—A. That is all.

Q. You are inclined to think they will try to hold this two or three per cent?—A. That is true, and my reason for saying that is that last there was a big firm came in and established themselves at Buffalo, with the determination of holding that Canadian market.

Q. It is a very small quantity comparatively speaking?—A. It is very small as compared with the whole, but it is a close market for the fields in Ohio, and parts of Illinois and Pennsylvania, and they have had this market for a long time, and they will not let it go until they have to.

By Mr. Chisholm:

Q. How many million tons did you say of soft coal came from the American into Canada?—A. Between fifteen and sixteen million.

Q. Between fifteen and sixteen?—A. Yes.

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Q. What is the total production of coal in Canada?—A. The total production of coal in Canada last year was about fifteen million tons.

Q. So that fifty per cent of the soft coal consumed in Canada comes across the border?—A. Yes. Ordinarily speaking we import as much coal as we mine.

By Mr. Cowan:

Q. Before you leave that Alberta situation: Am I correct when I say that the one deposit of anthracite coal of any size in Canada is that located at Sheeps Creek?—A. No.

The ACTING CHAIRMAN: He did not mention Sheeps Creek.

Mr. COWAN: Yes, he did.

WITNESS: Yes, I did, but I do not know that you could call it anthracite coal. In Alberta the only place it is worked is at Bank Head, by the Canadian Pacific.

By Mr. Cowan:

Q. Which is a limited deposit?—A. Yes, it is a limited deposit, and only amounts to about one hundred and fifty thousand, or one hundred and sixty thousand tons a year, but between Alberta and British Columbia, there is quite a possibility of their being anthracite there is what is known as the Ground Hog district. I do not know—I would not like to say Dr. Cowan—that the Sheep Creek coal is anthracite.

Q. But is it so near it?—A. Yes, it is so near it that for all domestic purposes, it would be actually as good.

Q. That is what I wish to impress upon the committee that there is a very large deposit of coal there so near anthracite that for all intents and purposes it can be declared to be anthracite coal.—A. Mr. Sharpe, Mr. Pat Burns' engineer, whom I know, and who recently died in Vancouver, and Mr. William Pearce, who is one of the C.P.R. men at Calgary—if their view are taken that coal deposit is a wonderful deposit, as it gives a wonderful analysis and is one of the very best steam coals we could get.

Q. Of all the coals in western Canada that coal would transport the best into Ontario; it would be the most profitable; it would suffer less from degradation?—A. Yes, but if we touch upon the question of transportation, to transport that coal into Ontario, would demand a tremendous freight rate.

Q. But of all the coal there, that would be the best—in Alberta?—A. It corresponds very largely to an analysis of the Crow's Nest coal; it is a very fine grade of coal—but there is also a fine grade of coal in the Kootenay series.

Q. But that has not been developed at all? That is lying there in billions of tons?—A. The Alberta Government have taken a very wise policy in that they are asking the people not to go into any new development until there is more investigation,—a policy which should be followed up.

Q. My opinion is that the coal is there, and that is the point I wish to impress on the committee that there is a large quantity of coal there which is anthracite coal to all intents and purposes?—A. Yes.

Q. And it is lying east of the Rocky Mountains?—A. Yes.

Mr. DOUGLAS (Cape Breton): And in unlimited quantities?

Mr. COWAN: Yes.

By Mr. McKenzie:

Q. You gave to Dr. Cowan and Dr. Chisholm the quantity in tons of bituminous coal that is annually consumed in Canada?—A. Yes, I can get that Mr. McKenzie the output and production of the coal in Canada for the year 1920 was 16,623,598 tons, and the coal imported for that same year was, bituminous, and run-of-mine 11,548,475, bituminous slack imported, 2,312,754; American anthracite coal and dust was 4,881,313, or 18,742,542 tons imported, as against the production of 16,623,598 tons for 1920.

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Q. Now, how was that production of sixteen million odd tons divided?—A. Oh, divided?

Q. Yes, as to provinces?—A. Nova Scotia, 6,395,545; New Brunswick, 161,164 tons; Saskatchewan, 349,860; Alberta, 685,934; British Columbia, 2,856,920 tons, and the Yukon Territories, 763 tons.

Q. Now, have you figures for the quantity of anthracite imported into Canada last year?—A. Yes, the anthracite coal and dust imported last year was 4,881,313 tons.

Q. Have you any figures to show what quantity of our own bituminous coal was exported—sent out of Canada?—A. The exports of coal in 1920 were 2,558,174 tons. That, of course, was very largely British Columbia and Alberta. Nova Scotia coal exports were very small last year.

Q. The export from British Columbia is quite substantial is it not?—A. I beg your pardon.

Q. There is quite an export trade from British Columbia?—A. Yes, of course, British Columbia from Nanaimo and Union Bay supplies the Northern Alaskan trade, but there is a very large bunker trade on the Pacific coast.

By Mr. Cowan:

Q. Do they not ship down south to the American coast cities?—A. Yes, to San Francisco, but that is all included in the exports.

Q. That Nanaimo mine is submarine?—A. Nanaimo is, yes.

Q. They are having the same difficulties because it is a submarine, as they have in Nova Scotia?—A. Yes, they have a very high cost out there, because they have to bring in their coal in that way.

Q. It is practically the same quality as the Nova Scotia coal?—A. Yes, very largely, as far as the analysis shows.

By Mr. McKenzie:

Q. We were speaking this morning to Mr. Dion about the production of Nova Scotia coal for gas purposes. We use the Nova Scotia coal for gas purposes. What do you say about that, Mr. Hudson? Is it suitable for gas producing purposes?—A. The Ottawa Gas Company is a very small concern when you speak about coal. I think Mr. Dion quoted they were using about twenty-five thousand tons in the production of gas and coke. When we think that at one time the Everett Gas Company—that is the Whitney Company—when it started, they were providing a market for Nova Scotia and Cape Breton coal in the winter time, which had not existed before, and it resulted in the greater development of several seams such as the Phelen seams, the Harbour seam, and the Gouvry seam, at Blockhouse. All this coal was submitted and tested, and in the ultimate analysis, it was practically tested at Syracuse, so that the question came around how long it would be before they could increase the output of this coal in Cape Breton, and as the Everett Gas Company could obtain this coal, they spent a tremendous lot of money putting in the gas works, and opening the railway from the mines in the Glace Bay district to Louisburg and the building of the piers to transport the coal by water, to the New England market and the quantity for quite a long time to the Everett Gas Company ran up to nearly half a million tons of coal a year. Now, as regards the use of Nova Scotia coal for gas purposes, I may say, in speaking of the smaller or medium sized cities that Halifax has been making gas out of that coal for seventy years.

By Mr. Cowan:

Q. And they have not poisoned anybody yet with the gas?—A. Not at all, not that I know of.

MR. COWAN: They are raising up a lot of things against that Nova Scotia coal. I do not know why it is allowed to continue.

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By Mr. McKenzie:

Q. After our Nova Scotia coal has been prepared for coking purposes, that is, when it is ground and washed, what percentage of sulphur still remains?—A. If you take the coal and it contains, say, one and one-half per cent of sulphur in the coal,—if you make that coal into coke, in the raw state, the sulphur will go to the end of the steel rails—speaking of a manufacturing plant there—it does not dissolve and go on at all, it does not follow—it stays there, but when you wash the coal, you reduce that percentage by one-half, so if your coal contains one and a half per cent of sulphur as at Sydney Mines, by washing the coal it is reduced to one-half of one per cent, and therefore does not take so much flux in the blast furnaces, and following through into the steel and into the open hearth, a purifying which is done by dolomite and limestone.

By Mr. Cowan:

Q. So you think there is not an excessive amount of sulphur in Nova Scotia coal?—A. There again, Nova Scotia coal has been successfully mined for a hundred years for use on the boats and steamers, and in fact when I was in the C.P.R., at one time they were bringing Pittsburgh coal down to Quebec to put on the Empress boats; they had a contract to make very fast time from London to Yokohama with mail. But in the winter the bunker coal was reserve coal mined by the Dominion Coal Company, and this coal was used on the *Empress* and she made the best trip she ever did with the reserve coal.

Q. So that, transportation being right, and salesmanship being right, there is no reason on earth, as far as I can see why that Nova Scotia coal should not sell in this locality and supplant American coal.—A. It did come up as far as this. Of course there were the very cheap rates as compared with the rates which obtain now. What they are I am not in a position to say.

By Mr. Chisholm:

Q. Mr. Hudson, I want to bring you down to the large coal areas at Mabou. Have you been able to get an analysis of that coal?—A. No, the Dominion Government department have made no analysis of the Mabou coal. I have tried in a great many places, and I have had the Geological Survey reports, and they have no analysis of that coal.

Q. Do you know the territory?—A. I have been on that field and been at the mine, and know that field.

Q. You have seen the article?—A. Yes.

Q. What is your opinion of it?—A. It is very good coal.

Q. Is there any unsurmountable difficulty in operating that mine, in your judgment?—A. Some years ago, I forget the date—the question came up about the Mabou mines, and Mr. Fielding sent me down there to make a special report.

Q. Yes, I remember the time.—A. I went down and made a report, which was considered eminently satisfactory.

Q. You remember at that time, Mr. Hudson, that the mine was flooded?—A. Yes, when I examined the mine, and examined the workings I noticed that. That mine should not have been flooded. By putting in a dam which could have been put in in twenty-four hours, the water could not have broken through.

Q. Your contention is that the present condition of the mine is due to negligence?—A. Yes.

Q. You made an estimate at that time of what it would cost you to drain the mine?—A. Yes, I think so.

Q. It was not very much?—A. No, very little; a very small amount.

Q. Now, another question. You made the statement before that the standard of depth to determine the quantity of coal in any given area is four thousand feet?—A. Yes.

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Q. If you have to go down four thousand feet, in order to determine the quantity of coal there—A. Well, excuse me. Four thousand feet is taken as the limit at which you can go down vertically and work coal properly.

Q. You do not know whether four thousand has ever been the depth to which they have gone down in that vast area there?—A. No.

Q. As a matter of fact, nobody knows that, because as far as they have gone, they have located six seams of coal one over the other?—A. Yes.

Q. You know something about the geographical position of those areas?—A. Yes.

Q. In your judgment could not that coal be brought up the St. Lawrence by water at a very reasonable cost as compared with other deposits of coal?—A. Yes. I may say I had occasion not very long ago to look into the proposition. There was some Scotch firm made an application to our deputy minister here about an available coal field that was undeveloped, and mentioned Cape Breton so that I assumed from that they were shipping people. The deputy minister asked me to make a report, and I did so and I instanced Mabou, and I suggested in reference to transportation to get out from the shipping here at Port Hastings, and also there is every possibility of the Eastern harbour being made available for shipping at no excessive cost, and at much less time than would be required to extend the Inverness railroad from Inverness so as to include St. Rose and Chimney Corner. I sent them the plans and maps and things of that sort, and they were evidently very much taken with it.

Q. Here is what I am getting at. Here (indicating) is Western Cape Breton Island, with all respect for these deposits—they are very fine deposits—but here is my contention: Here (indicating) is Western Cape Breton: could they not connect with the gulf of St. Lawrence by a straight line and avoid all the fogs and everything else, and all other obstructions, so that this coal could be taken to the river St. Lawrence here (indicating) more directly than from any other port of Nova Scotia?—A. That is, inside of Cape North. The other boats have to go around Cape North.

By Mr. Cowan:

Q. Is it not possible to put that coal on the boat at a point there in Cape Breton—on a boat which can navigate the St. Lawrence river all the way? Can the small boats not navigate through the gulf to save trans-shipping at Montreal?

Mr. CHISHOLM: It depends on the canals here.

WITNESS: Dr. Cowan, you have to trans-ship—take the Dominion Coal Company alone, running up to thirteen or fourteen or fifteen thousand tons a day. That coal has to be shipped in very large boats—

Mr. COWAN: I can see that.

WITNESS (continuing):—to stand the cost of transportation, because the small boat is a great expense. You cannot bring a boat up the St. Lawrence river because you have only fourteen feet of water on the sill at Cornwall, so that you cannot get very much more than a boat carrying two thousand tons over the Cornwall locks. That all opens up the question that Mr. Keefer has been speaking of so much about, the Georgian Bay Canal.

By Mr. Cowan:

Q. That will solve the whole thing?—A. Some years ago we figured a great deal on a boat called the *Fitzo*, a boat of about seven thousand tons deadweight capacity.

By Mr. McKenzie:

Q. Have you ever given any thought to the difference in cost of the transportation of coal up the St. Lawrence as between taking the coal in large boats to Montreal, and then sending it up in smaller boats through the canals, or taking the smaller boats all the way and going up through the canals to Port Arthur? Do you understand my question?—A. Yes, I think I do. From Sydney, at any rate, you cannot come any where because Pictou would be there, but from either the Whitney Pier or the North

[Mr. J. G. S. Hudson.]

Sydney, or the Dominion Coal Company you can run a ten thousand ton boat up the river with coal. When you get up the river, as far as Quebec, she has to go in the basin, and the discharging plant is not so big, but if you put it in at Hochelaga, there they run four or five grabs into her, so they can discharge that boat at the rate of four or five thousand tons an hour, and get it out very quickly which is an important thing, as the St. Lawrence is only open for navigation from the 1st May to the 1st October. If you run a small boat,—you build a small boat for coal carriers because in the coal boat—take a seven or eight thousand ton boat you have your engines aft and she is all hatches ahead from there forward, so when she comes under the drops all the hatches are opened up to the end of the boat and you get four or five grabs into her because she has no between-decks, she is open from the keelson up to the hatch combings and you have practically to put on no men in discharging that cargo. If it was a small boat, you could not afford to build it unless it was for a general cargo capacity and then you would have between decks and stanchions in each boat but if she had seven thousand tons, she would have a captain and first and second mate, and a boatswain, and then a first and second and third engineer, and she would have a crew of perhaps not more than thirty, where as if you were running a small boat you would have your captain, and first and second mate, and your first and second and third engineers just the same as the others, and if this small boat was one of a two thousand ton capacity, you would be running five boats instead of the one, so you would have an overcharge of four as against one—you would have four times that overhead charge

By Mr. McKenzie:

Q. You think then the better practice would be to carry the coal in large quantities to Montreal, for instance, and if it was to go on farther to, say, Port Arthur, or other ports, under present conditions, the better way would be to transfer it to these two thousand ton boats?—A. Yes.

Q. That would pay better than to send a small boat all the way up?—A. Undoubtedly.

By Mr. Cowan:

Q. Does that trans-shipping at Montreal cause a fatal degradation?—A. "Degradation" is not a very good word to use.

Mr. COWAN: I do not like the darned thing myself. It sounds too immoral for me. I cannot twist my tongue around it, but that seems to be the word they use.

WITNESS: There may be some loss in grading of the coal. But that is very immaterial. At one time when a Montreal agent wanted coal they loaded the steamer and he wanted a hatch of screen coal and a hatch of run-of-mine, and a hatch of slack. That was down at the mine, but now when we have got the mechanical grabs it is more advantageous as far as the coal is concerned to ship all the coal as run-of-mine, so that when the coal is taken out of the holds of the vessels, it runs up on a boom, the boom runs up about eighty feet over the hatch and then the grab runs back—the clamshell grabs—the two ton grabs, and that is emptied onto the screen, and the screening is done there at that point, so in transporting all the coal it is more advantageous not to separate it into grades until it reaches the point where it is to be consumed.

Q. Supposing you were taking the Nova Scotia coal up to Montreal in that way, and did the screening in Montreal: Would there be any difficulty in getting a hatch of the three different classes to which you referred?—A. No, the larger people in Montreal are the railway companies, and they want the screened coal or the lump coal to put on the tenders of their engine, and they screen the coal and then send the slack to the power house where they have designed the large furnaces and self-stocking grates, and they use that coal there, so the man who gets his coal knows he is getting screen coal in the ordinary trade term, whereas if he gets it at the mines, he is liable to have a great percentage of slack.

[Mr. J. G. S. Hudson.]

Mr. COWAN: I am more convinced than ever that all that is wanted in handling Nova Scotia coal is a little bit of business management.

The ACTING CHAIRMAN: Is there anything further? Our usual hour is about up.

Mr. DOUGLAS (Cape Breton): Mr. Hudson is always available.

Mr. COWAN: We may want him again. I think his statement this morning has been very, very good.

Mr. DOUGLAS (Cape Breton): And very interesting.

WITNESS: Mr. Chairman, I have made some extra copies of this plan which, however, are not coloured. If any of the committee want them—

The CHAIRMAN: For to-morrow we have the lignite utilization men here. Dr. Steele informed me that Mr. Stansfield is not with the board now, but Mr. Ross, the chairman, will be here.

Mr. COWAN: That is Mr. Ross, of Montreal.

The CHAIRMAN: As far as I know, that is our programme for to-morrow.

Mr. CHISHOLM: Have you made any arrangements with reference to hearing the evidence of these auditors who are coming?

Mr. COWAN: I think a wire should be sent.

The ACTING CHAIRMAN: You were not here when the matter was first discussed this morning, Dr. Chisholm?

Mr. CHISHOLM: No.

The ACTING CHAIRMAN: Do you wish to send for them now?

Mr. COWAN: I made a motion this morning; I do not know whether it was seconded or not.

Mr. DOUGLAS (Cape Breton): I second it now.

The ACTING CHAIRMAN: Now, the motion is made by Dr. Cowan, seconded by Mr. Douglas—Dr. Cowan have you written out the wire? I think you were to do that.

Mr. DOUGLAS (Cape Breton): Wire Mr. Dougall that these figures must be here to-morrow. Will that be all right?

The ACTING CHAIRMAN: Would you make it as positive as that, that they "must" be here, or shall we say that we expect them to-morrow?

Mr. DOUGLAS (Cape Breton): I understand that one of them came up on the train, and that Mr. McCaw was in Ottawa last night. A gentleman told me he saw him. If that is correct, and it is correct as far as I know, it looks as if they were endeavouring to belittle the committee, and I think it is time to be positive.

The ACTING CHAIRMAN: I would think that from what Mr. Elkin said this morning that it is a matter of checking the figures.

Mr. ELKIN: Mr. Dougall told me Mr. McCaw was in Montreal last night. I do not think he is here. If he is, I do not know it, and I want to be quite positive about that, because Mr. Douglas says he was here last night under an assumed name, and I do not think that is correct.

The ACTING CHAIRMAN: I did not understand it that way.

Mr. ELKIN: Mr. Douglas was under that impression. I do not think that is correct at all. If Mr. McCaw was here I would surely know it.

Mr. COWAN: I would say to wire him to be here immediately.

Mr. MCKENZIE: One of the directors of the company is here, and as far as I can see, there is not the slightest intention on the part of the company to withhold this information. I do not see why, when one of the directors is right before you why he could not take the responsibility of getting in touch with this gentleman and asking him to be here at the earliest possible moment—whatever that moment may be—to-morrow if possible. He can call up Mr. Dougall and tell him what we want.

[Mr. J. G. S. Hudson.]

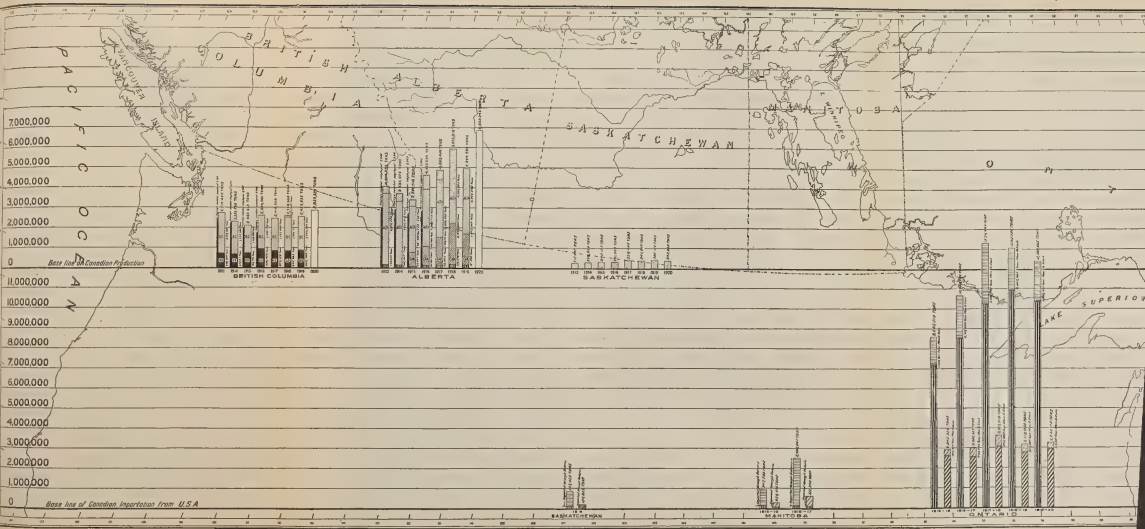
Mr. COWAN: I move that the Chairman be instructed to wire the Dominion Company that we must have these cost sheets not later than Friday, and ask for a reply.

Mr. CHISHOLM: Just there: Supposing these cost sheets involve a great deal of work to get them prepared and in proper shape. That takes time. I will admit that we should have been informed why they are not here. but it might take a couple of days. This may be work which involves considerable time to get them ready and in shape.

Mr. DOUGLAS (Cape Breton): The motion was for the original cost sheets, so they are all ready. That is not any excuse at all. We asked for the original documents and they should be prepared to hand them in at once.

(Motion carried).

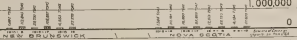
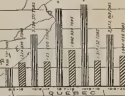
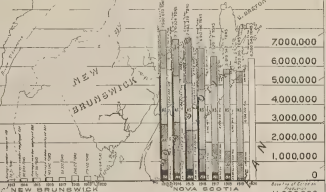
The committee adjourned until Thursday, May 12th, 1921 at 10.30 o'clock a.m.



MAP SHOWING THE PRODUCTION, DISTRIBUTION, IMPORTATION & CONSUMPTION OF COAL IN CANADA

Scale of Miles
0 10 20 30 40 50 60 70 80 90 100

Total Production (Expressed by height of bar)
Exported to U.S.A.
Exported to other Provinces
Other destinations
Consumption of Coal in Province in which it is mined
Anthracite Coal imported from U.S.A.
Bituminous Coal imported from U.S.A.
Average number of men employed



HOUSE OF COMMONS,

COMMITTEE ROOM 425,

THURSDAY, May 12, 1921.

The Special Committee appointed to enquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: We are to hear to-day from the Chairman and Secretary of the Lignite Board, Mr. Ross and Mr. Thomson respectively. We also have with us Mr. Kensit of the Water Powers Branch. The Committee decided the other day to hear him if time would permit. These are the two witnesses that we have to-day.

R. A. Ross, called, sworn and examined.

By the Chairman:

Q. What is your official position Mr. Ross?—A. In connection with this matter, I am Chairman of Lignite Board.

Q. How long have you occupied that position?—A. Since 1918.

Q. When was the board established?—A. At that date, 1918.

Q. So you are the first and only chairman?—A. Yes.

Q. What is your profession?—A. I am a consulting engineer.

Mr. COWAN: Mr. Ross might tell us how this Board is constituted, how the men are named to the Board, and by whom.

By the Chairman:

Q. I presume you are going to give us a statement?—A. Yes.

Q. State to the Committee what you have to lay before them?—A. The initiation of the Lignite Board rests with the Research Council. The Research Council was established in 1917, in December, and one of the first problems that was taken up was that of fuel. A Committee of the Research Council was formed, consisting of Dr. Adams, Dr. Murray, Dr. McKenzie, and R. A. Ross to study this question. We made up our minds that the fuel problem was the big problem of Canada. We also made up our minds that there was no use of the Research Council attacking it along the whole front, because the problem was too vast for their means at the time; and it seemed to us that it was our business to attack the problem at the most vulnerable point. It seemed to us that Saskatchewan, owing to the climatic conditions, the demand for domestic fuel was urgent, and that owing to its geographic position, was practically the balance point between coal shipped from the east and coal shipped from the west. We also knew that a great portion of our coal resources were in lignite with which that country was abundantly furnished; and it seemed to us that we ought to deal with that question because the price of domestic fuel in those days was about \$15 a ton, that is for anthracite. So we made investigations as to what had been done in other countries, and also in this country with regard to the turning of lignite into a domestic fuel equivalent to anthracite, and we found that a considerable amount of work had apparently been done both by the United States Government departments and our own. We reported to the Research Council in a report dated 1917, copies of which I have here. That report indicates the information we had at that time, and it seemed to us that we could then recommend the Government to go ahead and spend some money on investigation. Eventually the money was obtained from the Government, and an arrangement was made between the Dominion Government and the Provincial

[Mr. R. A. Ross.]

Governments of Saskatchewan and Manitoba whereby money should be subscribed, one-half by the Dominion Government and the other half equally by the two provinces. Once that money was obtained, the Board was constituted, consisting of Mr. J. M. Leamy, as representing Manitoba, an engineer; Mr. J. A. Shephard, representing Saskatchewan and myself as chairman. We were placed by the Governments in a very advantageous position because we have practically the rights of a company. We can hold property, and practically do business the same as an ordinary company can. We can buy or sell or handle our business without reference to departments, except the Auditor-General; and further the money necessary for the work was placed at our disposal without too much red tape. So, we have been enabled by the goodness of the Government in that matter to devote our attention entirely to technical matters and business matters associated with the development. Now the first thing to be attempted was the appointment of a staff, and the staff consists, ever since we started, of Mr. Lesslie Thomson, Secretary; Mr. French, engineer, and Mr. Stansfield, chemist. Mr. Stansfield and Mr. French were immediately sent to investigate all the work that had been done in the United States or in Canada in connection with the carbonizing of the product, and spent something like two or three months on that work. We found that a good deal of the information we had was not acceptable to the Board because the other experimenters had been trying in a laboratory way to produce results, whereas we had to apply whatever results we could obtain to a commercial result, namely the production of briquettes, leaving the question of by-products as more or less a secondary one. This information in hand, we then considered ways and means of being able to reduce a poor quality of coal to something equivalent to anthracite. Eventually it came to this, that we will take two tons of lignite and turn it into one ton of char or carbonized lignite, drive off the 33 per cent or 35 per cent of water that is in it, and drive off the gas which makes smoke, and drive off the lighter hydrocarbons which will be recovered as oil, pitch and ammonia sulphate as by-products and eventually leave a residue weighing about half of the original which might be briquetted by means of a binder into something which is the equivalent of anthracite. We found that the problems of drying, crushing and that sort of thing were pretty well worked out. We found that those of carbonizing and briquetting and binding were not easily worked out. We found that the carbonizers that had been used and tried were intermittent usually, requiring heating and cooling, retorts filled and emptied which would never do for a continuous process. We found that they delivered a very mixed material which did not bind well. Part of the material would be over carbonized, and part of it would be under carbonized, so that we could not depend on the carbonizing processes that had been tried for a continuous output. We therefore had to design a carbonizer of our own in which the material, having previously been ground is passed over in a thin stream not over half an inch thick over intensely heated plates, and there is a continuous stream of raw coal falling on those plates, and the gas is immediately taken off as by-products. So we are building that carbonizer of our own design for this purpose. Then with regard to binders, we have tried out a number of binders. I suppose we have made fifty tests of fifty different binders and combinations of binders. These tests of course, are only laboratory tests, and when we come to actually briquette we may find that the laboratory tests are misleading. But we do know something about binders at the present time, and we will know a great deal more when we get going. With regard to the carbonizer, to come back again, before commencing any work or spending any large amount of money on the plant, we set out in Ottawa to operate in the fuel testing station, a small carbonizer, and tested it out, and found it was apparently satisfactory. It was only after that we began to lay out the main plant with the carbonizers in it. Now all this construction commenced about June, 1920, and will be completed by June of this year, that is next month. We will have of course our commercial troubles, baby troubles with machinery inevitable at first, and we will commence in June. We will not turn out briquettes in

[Mr. R. A. Ross.]

une nor for sometime later I think. We will have to get our plant and equipment licked into shape, and then test out our processes and get them running smoothly. So it will be sometime towards August probably or in the fall, if we have thorough success and no troubles, that we hope to be producing in commercial quantities. By commercial quantities I mean that the capacity of the plant itself is 100 tons a day. If we find that our processes in some respects are not right—it is very probable that we will find that in some degree—we will probably be later than that. We have made tests of this fuel as turned out in Ottawa on our little experimental plant here, and in house furnaces last winter. The tests ran in one case 21 days and in another 44 days, and were conducted by Mr. Stanfield in his own furnace, which indicates that the fuel is practically identical, so far as heating is concerned, with anthracite. And it is noticeably better in some respects with regard to the ash, because the ash in the carbonized products is disseminated through the briquette so very freely that it is very interesting to watch the briquettes burn. They merely begin to shrink, shrink until there is nothing left but a little fine ash, which immediately falls to powder and a white ash. There is no coal carried out with it, or no burnable material left in it.

By Mr. Keefer:

Q. No clinker?—A. No. It is pretty free from that. That is what we have done so far, and that is what we hope to accomplish. Of course, after the manufacture is on a suitable basis it will then be up to us to sell. What we set out to do was to give, not a laboratory demonstration, but a commercial demonstration, not only of the processes themselves, but of the selling and acceptance by the public, and when we get that work done and the public satisfied, we will turn in a report to the Government outlining the history of the situation, the results that have been obtained and the design of the plants that are satisfactory and suitable for the purpose, and hereafter the public can feel themselves safe in going into the business themselves, and I fancy when it is a success a good many plants will be established in the north-west, especially Saskatchewan and Eastern Alberta, where the coals are more lignitic by single mines or groups of mines, to briquette their fires for domestic purposes.

Does that cover everything in the statement, Mr. Chairman? I am ready to answer any question.

By Mr. Cowan:

Q. About how much money have you spent up to the present in this plant?—A. The figures I am quoting are from our standard reports that go out every month to the Auditor General, the Minister of Mines, and the Deputy Minister; so that these are always available here in Ottawa in these places for consideration. We have got credit from the three Governments of \$680,000, of which we have spent to date \$99,674.

Q. Have you any idea of the amount of money thus spent that would be charged up to pure experimentation? In other words, supposing a private company were coming along and wishing to start up another similar institution, about what would the cost be to them in proportion to what you yourselves spend?—A. There could be no comparison, because we have done the pioneer work, and it is there for them to use. We will turn over all our information to anybody. I presume, it will be a public document, and there will be no investigation for a private company to make after we have done it, but we have the separation of the capital cost from carrying on experiments in our books. We can give you that.

Q. What I want to get at is this: The whole purpose of this is to induce private capital to go into the further building of these plants. I do not want any statement going out which would show an enormous capital outlay necessary, because that would deter capitalists from investing. Have you any idea at all as to what a plant similar to this would be erected for in normal times?—A. No, for this reason; we built this plant the smallest size that could be called a commercial plant; that has affected the

[Mr. R. A. Ross.]

capital cost per ton unfavourably, naturally, being a small plant. Secondly, it is an experimental plant, and nothing else. It was designed on these lines so as to be as flexible as possible. We have not built this in a compact way, such as we would if we were building a commercial plant and having the knowledge necessary in building a commercial plant, but we have built it in a loose jointed way, so that we might add here and there, or change to improve conditions as they might arise in the experiment. We were carrying on so that this plant would be enormously more costly than any commercial plant per ton that would ever be constructed hereafter.

Q. Then any private company could proceed to build a plant four times that size which would briquette 120,000 tons per year, and the cost per year would be much less than will now be possible in your plant?—A. Very much less.

Q. Supposing private capital were to be induced to go into this, do you know whether they would have any trouble in getting the necessary location on water in that area, or is there sufficient water for them by using the Souris, or how do you get your water there?—A. We get ours from the Souris river. There is a pipe line which supplies two big mines there, and we tap off that, but the Souris river is pretty small at times.

Q. Are there any dams on it to retain the water?—A. Yes.

Q. Do they conserve it at all?—A. Yes. They are dams to such an extent that in the summer time sometimes the Souris River did not appear to be running at all. It was a very slight flow. Water is quite a question there. We do not know, but we provide very liberally for our water, because we do not know just exactly what use we might or might not have for it. We might have to use steam in certain of our processes. A considerable amount of it, when we come to work it, so that we wanted to provide liberally in this case, and we have done so, but I do not think that the water question will be a great deterrent. It will be something to be carefully considered in every case.

Q. Do you know whether these lignite deposits run to Manitoba? You spoke of Saskatchewan and Alberta. Do they run into Manitoba?—A. No, very little. They cover the whole of the southern part of Saskatchewan, up to Saskatoon, and they cover the eastern part of Alberta, practically along the whole eastern face; in other words the provinces of the West have their oldest coal in the Rocky Mountains, which is an anthracite, crushed though, but an anthracite. Then successively coming East the coals seem all to deteriorate, and you get the oldest coal, which is the anthracite progressively down to the youngest coal, which is the lignite, and the change is pretty marked, so that the further east you come, the poorer the coal.

Q. You said that you had \$690,000 odd of credit, and you evidently spent \$600,000 of that. How is your Board going to continue? How are they going to be financed after you have this completed?—A. You mean as far as—

Q. I presume some Board will have to continue to operate this institution. How is it going to be continued?—A. I do not know. That is a question of policy for the Government to determine. It seems to me that it would be wise for the Government to keep that plant as an experimental plant, to test out all the coal in the northwest in the same way, and especially to test them out for something that we are not primarily interested in at the moment. That is the economic production of by-products.

Q. That is what I want to get at?—A. Now we are primarily concerned—and we are going to have trouble enough with that alone—in getting out the briquette. We are not so interested in our by-products at the moment, and later on, when we have a successful briquette, then we ought to turn our attention to the getting out of by-products.

Q. This plant will be suited for that purpose?—A. Yes, suited for that purpose and it is not suited for commercial production in competition with great commercial plants which will be started later, with all the experience which we had to pay for at their service.

[Mr. R. A. Ross.]

Q. To do that you will need further support from the three Governments?—A. Oh, I suppose so.

Q. Would it be possible to add a few cents to the selling price of each ton of lignite, and thus create a fund for yourself. Would that be possible?—A. Yes, we might do that.

Q. Have you any idea as to what you are going to sell the briquettes for in Winnipeg, and Regina?—A. No, I have been keeping that under my hat very carefully.

Q. One report said \$11.50 in Winnipeg?—A. No, not by us. The only report we made with regard to price was this made in 1917, which shows the price we then estimated was \$7 a ton at the mine. Since then the cost of raw material that we use has gone up. We estimated the raw material at that time, the pine at \$1 a ton. Now it is over \$2 a ton, which will add considerably to the cost of \$7. Farther than that the cost of labour and material, and everything else has gone up proportionately, but we feel that the difference between the price that is charged for anthracite to-day which is now about \$25 in Winnipeg, is so much of an increase that the spread is much more in our favour than it has been. It is difficult to think that we should rise about \$12, although I do not want to be quoted.

Q. That is just one-half of what we are paying for anthracite coal. If you could produce that and put it on the Regina market at \$12, it won't be very long before you will want another plant?—A. That is merely a pious hope. I do not see why we should go above that.

Q. How do the briquettes stand transportation?—A. Very well. We have done this; we have set ourselves a standard that is obtained by no other briquette. It is a higher standard than any briquettes I have ever seen. They are hard, and we tested them out in piles during the winter time. We have frozen them and put them in cold water, and we have tried all kinds of experiments to see their weathering qualities, and I think I can say, without any question, that we are striving for a standard that has never been attempted by anyone else. Here is a sample of it. (Producing briquette.)

Q. Would you be inclined to believe that those briquettes would be acceptable to the people of Ontario in substitution for anthracite? The great claim here is that the people of Ontario buy nothing for domestic use in the shape of soft coal. They insist upon anthracite. This is the nearest point to Fort William where anything of his kind can be produced in the West, and we are considering that problem, whether or not we can get western coal into any portion of Ontario?—A. That question of getting western coal into Ontario is a question of freight rates, and that alone. The people will use that coal just as freely as the anthracite. There is no question about it. We have had this experience. I am on the Peat Board, and I say that they will buy it at prices which are entirely out of line with the heating value of it. They are looking for new fuels, and there is no more difficulty in selling that in Ontario than selling it in the West.

By Mr. Cowan:

Q. The point is 700 miles nearer to Fort William, consequently there would be that much less transportation cost. So it stands up in the matter of transportation, should judge, pretty well. What about the smoke?—A. We expect that we will have a certain amount of smoke. We do not expect it to be quite as smokeless as anthracite because of the tar that is in it. We will probably use tar for the rest of our binding. Of course, the less tar we use, the less smoke there will be. As for the other material we use, that is char material, it is absolutely smokeless. So that the only evidence of smoke will be due to the binder. In attempting to get a smokeless fuel, we have also tested out sulphide pitch, which is obtained from the paper mills. It is practically the lignens and resins of the wood. It makes an excellent binder

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and is perfectly smokeless. But it is not waterproof, and we have to submit it to another process to waterproof it. At the commencement of operations we are not going to do that. There will be a certain amount of smoke from it, but I do not think it will be very objectionable.

By the Chairman:

Q. How long does the smoke continue after you put the briquettes on the fire?
—A. It depends on the heat of the fire; it is merely the volatile from the binder. The binder would account perhaps for 10 per cent.

Q. I took some of them to my house last Sunday and we cooked a roast of beef and watched it very carefully, and I noticed that the heavy smoke did not last more than two or three minutes.—A. It is not likely to last long. It is immediately driven off.

Q. We used them last Sunday to cook a roast in our house. We have been burning American anthracite in the same stove for the last three months, and my wife says she cooked a roast more easily with the briquettes than with the anthracite. She says she prefers them to the anthracite.—A. It makes a very nice stove fuel, and a very nice grate fuel, lovely, equal I think to anthracite in the ordinary furnace.

Q. Does the smoke not continue after the briquette is thoroughly heated through?
—A. Until the lighter hydro-carbon is. It is pitch, and in that pitch there is a certain amount of lighter pitch. As soon as they are heated through, the smoke ceases.

Q. It smokes until the individual briquette is heated sufficiently to drive the smoke off?—A. Yes.

By Mr. Keefer:

Q. In binding, it is put under pressure?—A. Under pressure.

Q. Have you considered at all eliminating the pressure of the binding in any way?—A. In the act of briquetting, we use the roller press. We do not use the old-fashioned plunger press because it is an enormously expensive thing both to operate and to buy, and is very slow in briquetting. We use the roller press and get good results.

Q. You find no difficulty in the briquetting originally, but with the binder?
A. The trouble is with the binder and the carbonizing.

Q. Pitch is the only thing you are at present using as a binder?—A. We are going to start with pitch because it is easier to use. When we get our process all smoothed out, we have tested many other binders and know their qualities, and we can take them up.

Q. Have you tried sulphate of soda as a binder?—A. No, we have not. We know it has been used, but I do not think it is commercial.

Q. As regards the question of peat, have you considered your ability to use peat in the same manner, breaking it up, crushing it, getting the by-products?—A. No, we have not come to that yet.

Q. As regards Ontario, would it not be worth consideration?—A. Why not go through the natural process and use peat as you are selling it to-day? It cost nothing; that is to say, it will cost a great deal more if we have to take the peat and put it through a drying process.

Q. In your handling of those briquettes you get certain by-products?—A. Yes.

Q. Which ought to pay for the handling?—A. With regard to by-products, we are in this position: There is no use in looking for by-products unless you have market for them, and our market for by-products is very very small. So we are not in the same position as they are in Germany, for instance, or in the industrial districts of the United States. There they have big markets for their by-products and sell them rapidly.

[Mr. R. A. Ross.]

Q. You do not need to look for a market for them?—A. I think we do.

Q. For fertilizer?—A. I think we do.

Q. What is the price of it, \$20 a ton is it not?—A. The use of fertilizer is not appreciated in Canada, I think, but some of you gentlemen may know more about that than I do.

Q. It is not appreciated in Canada at all, practically, but outside of Canada there is a tremendous demand for it. Take for instance the sugar lands in the West Indies. It is exported there. Take the western farm lands in the United States. There they have realized the value of artificial fertilizer, and I should have thought that any artificial fertilizer would find a ready market.—A. We have gone into that in the Research Council, not in this connection but in other connections; and we have found, so far as we can judge, that the fertilizer market in Canada is negligible. If you go into exporting, you run into competition with people who have a shorter haul and people with denser manufacturing, and so on, so that they would have an advantage. As I say, it is something that will come on later.

Q. Are these deposits of lignite in a rich agricultural district?—A. Yes.

Q. So that it is only a matter of demonstration on those rich lands out there?—A. Yes.

Q. So there is a possibility of a good market for fertilizer out there?—A. Remember that there will be no market until these lands are mined out, and they will mine them out to the last. That is virgin soil, and it needs water more than fertilizer.

Q. They will not use fertilizer there?—A. No.

Mr. COWAN: Not for a number of years in Saskatchewan.

By Mr. Keefer:

Q. What do you contemplate doing with the gas that you get?—A. We are using that for our own purposes.

Q. For your own services?—A. We require every bit of it.

Q. So there is no by-product there?—A. Not at the moment.

Q. What other by-product will you have?—A. Lignite pitch, which by the way, fortunately, is not a very good binder. I wish it were.

Q. That has a good market?—A. Well, yes, we could do a certain amount with that, but we are not interesting ourselves very much with these things. We are facing one difficulty at a time. We want to get a briquette, and we want in that briquette as many heat units as possible.

Q. Do you know what quantity of oil would be produced?—A. We know what can be produced. We have got that all worked out. We have got this worked out from carbonizing temperatures varying from 350 degrees to 690, and the tar oils will come out from practically nothing at 350 degrees up to 5 gallons.

Q. Per ton?—A. Per ton. That is by using that particular temperature, but that particular temperature might not suit us for briquetting. What we need are briquettes, and the rest can come or go for the moment. Once we get our problems all solved, that question,—the most economic problem with regard to by-products—will be taken up. That is why our plant should be kept in continuous operation to get out these by-products and to demonstrate the commercial possibilities of the by-products.

Q. I would say that you would also lessen the cost of production, if you could produce five gallons of oil to one ton of lignite, that would be on 100 tons 500 gallons?

—A. I do not know, it all depends.

Q. It would be an important factor?—A. You are going over the same ground as they have gone over in the States. They said, "We will take one ton of material and carbonize that we will be able to get five gallons of oil". Then they took another ton of the same material, and they said, "Out of this we will get 12,000 cubic feet of gas". Fine. Then they took a third ton of the same material and said, "We will turn this into pitch," and they got so much pitch. But when they added all these

[Mr. R. A. Ross.]

things together they found that there was more got out of the substance than there was in the original thing. The question is to find a balance between the by-products. We will very largely determine for our briquettes what is the best temperature to work out our briquettes at, and that will determine how much oil comes out.

Q. That will come later of course?—A. Yes.

Q. What I am trying to get at is this: In your rough estimate of the cost of this briquetting, have you placed any value on the by-products?—A. No.

Q. So you have all these to the good?—A. All to the good.

Q. Then it is a good proposition?—A. It is all velvet.

Q. In the United States are they not doing this profitably with the by-products?—A. No, they are not doing anything commercially with the lignite. For what we are trying to do the Congress of the United States has given to the Mines Department \$100,000 to spend on the job.

Q. There are no private concerns operating that you know of?—A. No.

Q. Speaking of the transportation, which is the key to the problem, what distance will this be from Winnipeg?—A. About 400 miles I think.

Mr. COWAN: No, it is about 300 miles from Winnipeg. It is 356 miles from Winnipeg to Regina and you are nearer Winnipeg than you are to Regina.

By Mr. Keefer:

Q. So that if you want to figure on supplying Ontario you have to figure on a haul of 700 miles?—A. Yes.

Q. And then water transportation?—A. Yes.

Q. Have you made an estimate of what that haul of 700 miles would cost?—A. No, but I have something to suggest here. Mr. French, our engineer, has been working on the question of freight rates and the cost of coal to see whether the balancing point of the cost as between coals from the West and coals from the East could be placed somewhere between Winnipeg and Fort William. By way of illustration, this country owns railways; it has enough of them, why not use them? If some arrangement could be made with the railways to carry freight at the ordinary freight rates to that balancing point, they would lose nothing and from there could carry it below cost. You might extend that a little further, and take our own products from the West very much farther East, and stop a great deal of them going into the United States in the same way. In other words use the railways in combination with our coal industry without penalizing the railways in any sense, more than they get the same rates as they are getting now, and carry it as far as the balancing point, so that they do not lose anything on what they would get ordinarily, and then the cheaper rate beyond that balancing point, but you might disperse it eastward a few hundred miles.

By the Chairman:

Q. The evidence we have had on that line shows that if coal were carried, even at operating cost on the railways, it would still not pay them to bring the western coal?—A. Yes.

By Mr. Cowan:

Q. But that is bringing it 700 miles more than the briquettes would have to be brought. Have you considered the question of bringing down a car load or two of briquettes to Ontario for experimental purposes, to find out what it would cost to bring them east, and how they would stand it?—A. We would not need to do that.

By Mr. Keefer:

Q. That is quite easily obtainable. The difficulty is going to be to get into Ontario at a price. Do you think that is feasible, unless you get great values on your by-products?—A. I do not.

[Mr. R. A. Ross.]

Q. You have to look to your by-products to make that a commercial proposition in Ontario?—A. Yes.

Q. You have to utilize the by-products locally; that is the whole problem?—A. Yes, but of course this is not intended as a fuel proposition for the whole of Canada. This is intended as a local measure very largely.

Q. And you are on the right track. If you work out those by-products you have evolved there, then these briquettes might be the by-products?—A. Yes, they might.

Q. And you may be able to sell these at very small cost?—A. Yes.

Q. Then you could supply Ontario?—A. It depends on the market. For years before the war Germany burned practically no raw coal. Germany took all of her poor coal and put it through some process, and extracted from it what she could get in the way of by-products, and used for manufacturing purposes the remainder. To-day, since she has lost her mines at the south, and during the war, she has done very notable things in regard to lignite. She has turned the lignite practically all into by-products.

Q. There is where the whole problem lies.—A. We are working in another direction. We are trying to get fuel, and by-products are secondary. They had to get by-products because they wanted the oil, and they got them during the war.

Q. The problem would be wonderfully helpful if they could tackle by-products?—A. Yes, but that is the whole thing.

By Mr. Cowan:

Q. There are billions of untold wealth in western Canada if the people only knew it?—A. Absolutely.

Q. Not saying what is going to happen in Alberta with the coal fields?—A. Exactly.

Q. Coming to the point where you will be fixing the selling price of briquettes, naturally you would take into consideration the amount of money invested. Are you going to charge into briquettes the cost of experimentation, or are you going to write it off as lost, and sell them at a proper capitalized investment?—A. I do not know; we have not gone into that yet. We have to find out our troubles as they arrive—that is manufacturing troubles. If the by-products will stand the capitalization that we have here legitimately put into the plant, and not into experiments, then it is abundantly evident that any commercial plant is very much better off than that.

Q. And you have to meet that competition provided the commercial plant put it up?—A. Yes.

Q. I do not see how you would be able to face competition of that kind?—A. Well, it is a question of policy with the Government, but I do not think they would want us to cut the market all to pieces. I mean that if we should get the idea that under commercial conditions briquettes could be produced for merely the operating cost, why you would get nobody to invest in any of these plants afterwards; in other words you must not spoil the market.

Q. You would be defeating your own ends?—A. Yes.

By the Chairman:

Q. Is there any more difficulty in briquetting lignites than bituminous coal?—A. Oh, very much. The briquetting of anthracite coal, for instance, is very simple, because the anthracite has a structure of its own. The little particles of anthracite, no matter how fine they are, are hard and solid, but we get out of the char of the lignite, the char itself, more like a coke, and therefore you require more fibre and more pressure, and you do not get as dense a briquette as you would from lignite.

Q. What about bituminous?—A. Bituminous is very seldom briquetted; I do not know.

[Mr. R. A. Ross.]

Q. You may not be able to answer this question, but is there any advantage in briquetting the lignites of Saskatchewan, over briquetting the bituminous coal of Alberta?—A. A great deal.

Q. It would be nearer the market, but it may be more expensive to produce the briquettes?—A. Yes, I fancy the Alberta will still do the briquetting, as it is a saving.

By Mr. Keefer:

Q. And avoid the waste?—A. Yes. And the waste in our Western mines is simply enormous. They are mining just the same as wheat mining. They run the mining business in an amateurish way. They use up a mine, and as soon as it becomes difficult to get the coal out they let it fall in. That mine is gone, and the breakage is enormous, and the dust is enormous, and if we do not mend our ways in that regard we are absolutely going to ruin the heritage we have got, because we are going at it in a very bad way.

Q. If Alberta and Saskatchewan become a manufacturing District to purchase these by-products of yours, this coal question is solved?—A. Yes.

By Mr. Cowan:

Q. The thing is to take the industries to the coal, instead of taking the coal to the industries. It is only a question of a few years before Alberta will be the biggest manufacturing province in the Dominion of Canada. There is no question about it at all. You say the Research Council is responsible for this. That I think is admitted on all hands. Has the Research Council ever considered at all those reported lignite fields up north of Cochrane?—A. If the lignite fields were there you could apply the same process to that, but it is a little against the grain to consider any coal as being north of Cochrane. That whole district has been glaciated and I doubt very much if there is any value in it.

Q. They must have located coal somewhere. Look at the map in the other room, and you will find a coal area mapped out and lignite marked all over it, and I have heard people saying that there is a substantial quantity of lignite up north of Cochrane?—A. I am glad to hear it.

The CHAIRMAN: It is said there is deposited there 37,000,000 tons between Cochrane and James Bay. I think there is some foundation for it.

By Mr. Cowan:

Q. I suggest that your Research Council get busy and look into that?—A. Our business is not to look into that; it is to find out ways of doing it. This process we have worked out will apply anywhere.

By Mr. Chisholm:

Q. If you find it in Cochrane, according to the Chairman's statement, would that not eliminate the question of transportation to a great degree as compared with Saskatchewan?—A. Yes. Do not forget that the Research Council is not interested in solving your commercial problem. We are developing a process that can be applied anywhere, and it is up to the commercial men to take it up.

Mr. CHISHOLM: That is what I had in view when I mentioned that.

By Mr. Keefer:

Q. You are a consultant in hydro-electric work?—A. Yes.

Q. Frequently called in that capacity?—A. Yes.

Q. Can you give us any information and assistance in regard to the question of development of these coal deposits where there are not water powers to develop electrical energy and transmit it?—A. Yes, I have some very strong views on that subject, and brought them up before the Engineering Institute at its annual meeting four years ago,

[Mr. R. A. Ross.]

and got a resolution passed to memorialize the Government on that question, and the question is this; you cannot separate the coal problem from the power problem. They are both linked together. We have uses for coal in Canada for three general purposes; in the first place for manufacturing, burning under boilers, in the second place for domestic purposes, for heating houses, and in the third place for railways.

Q. Is there not a fourth use for industrial life, not under the boiler, but some process in simply heating, but utilizing it on the product?—A. I think that would be considered industrial.

Q. It is not only regenerating on the boiler?—A. I mean generally. We have in Canada here really four Canadas; we have the Maritime Provinces; then we have got the intrusion of Maine, then we have the Central Provinces, Ontario and Quebec, then we have the Western Provinces, and a separation again, and then we have British Columbia. Now each of those Provinces has requirements and facilities different from the others, and each group should be studied by itself. For instance in the Maritime Provinces you have plenty of coal, and a comparatively fair amount of water power. You could take up that power problem, and supplement your water power with coal, and handle the whole power proposition very nicely, and cover your domestic needs by some process of carbonization. If you want anthracite coal you could make it out of coal down there, by the same process we are doing here. You could cover your railway problem in the mines and your manufacturing problem. You next come to Ontario and Quebec and you have a proposition with any amount of water power and no native coal—practically all imported, practically everything west of Montreal comes from the United States to those two provinces, and yet they have any amount of water, so that the coal would be only needed to be imported into those Provinces for domestic purposes. Then in the north west you have Manitoba with a certain amount of water power, and no coal. Then you have got Saskatchewan and Alberta, the richest district which we have in coal, and no water. You have the British Columbia situation with lots of coal, and lots of water power. Now, if that whole proposition could be studied by somebody who looked at these two groups together, both the fuel problem, and the power problem—because they are interchangeable in certain regards—and mapped out a policy the Government could follow with regard to those problems, I think it would be of the utmost value, and I think if you left out of your fuel problem all reference to the power problem you would not cover the ground.

Mr. KEEFER: Quite so.

By Mr. Keefer:

Q. Take the situation facing Ontario and Quebec, where there is no coal. You have studied the hydro-electric question. What have you to say as to the St. Lawrence and its utilization for hydro-electricity?—A. Any hydro-electric proposal is a question of economics pure and simple. The development of the St. Lawrence is a question that is tied up with the navigation interests.

Q. The two must be taken together?—A. The two must be taken together. What it means in dollars I do not know, the Government does not know and nobody knows. Therefore, it would not be policy for me to express an opinion. It is a question purely of dollars and cents. The cost of water power is the cost of money. The cost of steam power is the cost of coal. What I mean is this: In a steam plant your coal costs govern; in a water-power plant you burn no coal, and you have, practically no labour, you are burning capital.

Q. Can you tell us the ratio between these two? What is the cost of horse power and of coal anywhere in a reasonable area of Ontario?—A. There is none to-day.

Q. No what?—A. There is no ratio.

Q. What do you mean by that? What is the horse power cost from coal in Ontario?—A. I do not know.

[Mr. R. A. Ross.]

Q. You know the price of coal?—A. I do not know. I know less about the cost of horse power every year I get older. There is nothing easier to talk about than the cost of horse power, but it is a most misleading thing. I do not know how to determine it, and I do not know anybody who does.

Q. You were cutting it rather fine. It seems to me that we can get at it approximately. How many tons of coal are there to a horse power?—A. Let me ask you a few questions. Are you operating on a 24 hours' day?

Q. A 24 hours' day?—A. Operating all the time?

Q. All the time, never letting up?—A. I am not going to say, it is a matter of arithmetic.

Q. You know it as well as anybody does?—A. I cannot tell you that. Let me illustrate. When the Hydro was first initiated—

Q. I am speaking of the general cost of generating electricity from coal.

Mr. Ross: It depends on the price of the coal?

By Mr. Keefer:

Q. Take it here in Ontario. Your coal in the power houses costs \$10 a ton?—A. I do not know.

Q. You do not know the cost of a horse power for 24 hours?—A. I can work it out for any specific case, but I will not say offhand what the cost of a horse power is because I do not know. I know less every year that I get older, and I have been in this business for thirty years.

Q. You know the capital cost of hydro?—A. Before the war, I always hesitated to recommend the installation of a hydro plant in competition with the coal when the cost of the plant exceeded \$100 a horse power, capital cost. I have recommended up to \$150, but it was always with considerable hesitation, and only in special cases. Since the war, with everything so changed, I do not know where we are at. Money is changing, labour has changed, materials have changed, and the cost of everything has changed.

Q. Your \$100 estimate has not decreased?—A. No.

Q. You have a wider margin now?—A. Yes, and yet your \$100 costs you more money.

Q. \$100 prior to the war was your basis?—A. Yes, anything below \$100 we said "yes"; anything above \$100, we said "We will consider that very carefully". It was a sort of dividing line.

The CHAIRMAN: Are there any other questions that the Committee wish to ask Mr. Ross?

By Mr. Keefer:

Q. You have been working on this problem of the coal in Saskatchewan; do you not think as a community we ought to turn our attention to this big problem facing us here on the St. Lawrence just as vigorously as on the others?—A. Yes.

Q. Even more so?—A. If we are ever going to get from under our great burden of debt, we will have to scratch gravel in every direction.

Q. Which is of the greater importance?—A. I do not know. They are both so very important that they ought to be considered simultaneously.

Witness retired.

LESSLIE R. THOMSON, called, sworn and examined.

By the Chairman:

Q. What is your official position?—A. I am secretary of the Lignite Board.

Q. How long have you occupied that position?—A. Since October 1st, 1918.

Q. Have you any statement to make?—A. Mr. Chairman, I can add very little to what my chairman has so clearly put before you. There are one or two points which may interest you in connection with the physical standard of the briquette. So far as we have any records in our office the physical standard of that briquette is almost perfect. What we call No. 1 has a far higher standard physically than any other briquette on this continent.

Q. What do you mean by physically?—A. I mean the standard tests, such as freezing, dropping the briquette 10 or 15 feet and so on. This briquette would stand the test of falling from the ceiling of this room to the floor. While the fin might be broken, the briquette itself would not be broken. The freezing tests afford some indication of the transportation ability of the product. They are conducted by soaking the briquettes in water for 24 hours, freezing it below zero for 24 hours, thawing it again and soaking it three times. The number 1 and No. 2 briquettes stood the test completely.

By Mr. Cowan:

Q. What is the heating value of this briquette compared with the briquette manufactured at Banff by the Bankhead Company?—A. You can take it at about 19/20.

Q. That is 19/20 of the other?—A. Yes.

Q. What is the difference between the two in the process of manufacture, do you know?—A. I do not quite understand your question.

Q. What is the difference between the two in the process of manufacture?—A. They both go through roughly the same process, except that ours is subjected to a much more rigorous drying, necessarily, on account of the higher moisture contained in our material. We have first to drive out 35 per cent of moisture before carbonizing at all. Then the carbonizing is carried on until there remains in the product about 8 per cent of volatile matter.

Q. Is there as much pitch or tar binder in this as in the other?—A. We have more. I do not know the exact quantity of binder in the Bank Head briquette, but you can take it that ours is much higher. We found that a carbonized briquette required almost double the quantity of binder that an anthracite briquette required. Apparently this is due to the physical structure of the two materials. It was rather an astonishing result to us.

By the Chairman:

Q. What is the relative cost as between the two?—A. I do not know the cost of the Bank Head briquette.

By Mr. Ross:

Q. Have you tried oils as a binder?—A. We have tried oils, pitches, asphalts, coal tar, resins, in fact there is hardly anything that we have not tried.

By the Chairman:

Q. Where do you secure this pitch?—A. Our pitch will come from Sault Ste. Marie, from the Dominion Tar & Chemical Co.

Q. Is it costly?—A. We are just about to conclude a contract with this Company at a figure that is considerably lower than we expected to have to pay a year ago.

[Mr. L. R. Thomson.]

Q. We are great on costs in this Committee. Perhaps you could tell us what your pitches has been costing in the past.—A. It has not been costing us anything in the past, because it has been presented for experimental purposes. We have only used it in experimental quantities.

By Mr. McKenzie:

Q. Could you use coal-tar as a binder?—A. Coal tar pitch is a more refined product and a more constant product than coal-tar. The pitch is made from the tar.

Q. When you talk about pitch tar you talk about pitch pine tar. You say that the pitch tar which you are speaking of is a higher grade of coal tar?—A. The phrase I used was coal tar pitch, that is to say pitch made from coal tar.

Q. You use that as a binder?—A. Yes.

Q. Is a ton of briquettes more bulky than anthracite? Could you get as many in the ordinary car?—A. I think they would be a little more bulky.

Q. In that case the transportation charges would be slightly higher?—A. No, we will be charged so many cents per 100 lbs. I do not know how many tons you can put in a car. Provided you made up a car-load lot, our freight rate from the plant to Winnipeg is \$2.90 on the mileage rate per short ton.

By Mr. Maharg:

Q. Would you have any difficulty in getting a minimum car-load?—A. No difficulty whatever.

By Mr. Cowan:

Q. Having determined upon your policy as to selling between the two provinces of Manitoba and Saskatchewan, having jointly entered into this agreement, I suppose you will divide the product between the two provinces?—A. We hope so. We shall make it a fifty fifty distribution, and shall distribute through the ordinary channels of trade, exact method we do not know yet. In other words, treat this whole problem as a commercial problem.

By the Chairman:

Q. Your out-put would be what?—A. 100 tons of briquettes per day.

By Mr. Cowan:

Q. Thirty thousand tons a year?—A. That is a rough estimate.

By Mr. McKenzie:

Q. Is this sample you have produced the usual size of your briquette?—A. Yes, it would be slightly differently shaped. These briquettes were produced in our experimental plant at Ottawa, erected to avoid the possibility of spending large sums of money in the erection of a plant that might afterwards prove wrong. That is known as a pillow-shaped briquette. The briquette we shall be producing at Bientait—

Q. Is it not much larger than that?—A. No, about a two-ounce briquette. This is about one ounce and three-quarters.

Q. You have briquettes larger than that?—A. Oh, yes. Briquettes are made in America up to about 22 ounces, for foreign export.

Q. I mean an ordinary comparatively small briquette, but larger than the ones you produce?—A. Yes, all sizes.

Q. I saw them briquetting coal at a place and one briquette would be about the size of three of these?—A. An egg-shaped briquette? Yes, we shall be producing an egg-shaped briquette, but smaller. You see them at Cape Breton.

[Mr. L. R. Thomson.]

By the Chairman:

Q. This is the size of stove coal?—A. Yes, our briquettes will not be such a size that they cannot be used in stoves. The benefit will be that there will be no fin on it, or practically none.

Q. And that is an advantage?—A. Yes, and it will not be subject to so much breaking in transit. That is a very good shape for burning.

By Mr. Cowan:

Q. It makes a convenient size for a range or hot air furnace?—A. Yes.

By Mr. McKenzie:

Q. Can you give the Committee the price of your briquettes per ton as delivered at Winnipeg?—A. Well, the board had heretofore confined itself to the statement that we will have a margin between our own selling price in Winnipeg, and the price at which anthracite coal is sold, because it is the anthracite with which we are competing. That is the only official statement we wish to commit ourselves to.

Q. Can you give us the price, regardless of what the other fellow is doing?—A. We do not know our operating cost. We have never operated yet.

By Mr. Chisholm:

Q. You are in the experimental stage?—A. Yes.

Mr. McKENZIE: I have heard of tenders put in \$50 higher than the next highest tender. Do you understand that some people put in a tender "my tender is \$50 higher than the next tender"?

Mr. KEEFER: That is not the way they do things in Nova Scotia.

By Mr. McKenzie:

Q. If you did not have to be competing with the anthracite mine at all, what I want to know is, what would you sell your briquettes for in the open market?—A. The Research Council published a report based on the 1917 cost, on which a figure of \$7 a ton was quoted at the mine. This does not include any profit. Mr. Ross also mentioned a price of about \$11 or \$12 at the mine, including profit.

By the Chairman:

Q. Anthracite was selling at about what figure?—A. At about \$14 or \$15, and to-day selling in Winnipeg at \$23.50 to \$27.

By Mr. Keefer:

Q. The price of briquettes is going to be governed largely by the market?—A. And the possible by-products are all velvet.

By Mr. McKenzie:

Q. If anthracite is selling at \$27 in Winnipeg to-day, what would your product be sold at?—A. We prefer not to commit ourselves, except that it will be lower than anthracite.

Q. You are waiting for anthracite to go up? (No answer.)

Mr. COWAN: It will take some little time to determine the actual cost.

WITNESS: I would like to point out that any estimate we make on cost is an estimate based entirely on other people's experience. The plant at Bientait has been designed as an experimental unit, with the utmost degree of elasticity in management and control. In other words we can bi-pass different machines and so on and that all means extra investment in the structure. The costs cannot be projected, and will only be known when they are actually determined.

[Mr. L. R. Thomson.]

By Mr. McKenzie:

Q. Then you are still in the experimental stage; is that all it is?—A. It depends on what you mean by experimental. We have done our experimental work at Ottawa, and our plant will be operating in a month or six weeks.

Q. You are not a competing factor in the fuel market?—A. Not yet.

Q. That is what I meant?—A. One of the members of the Committee has brought up the question of by-product, and it is of course a most important question. The most important by-product we would have for sale at the present juncture, or shall have for sale, would be lignite tars. We shall have about 1,000 gallons of lignite tar which we can dispose of if a market can be found. We have explored, so far as we know, practically every channel to dispose of that tar, and have reluctantly concluded that we will have to burn it under our boiler. After completing our own analysis of our own tars, we sent the analysis and samples to the larger tar users in the country, asking them if they could use it for road binder, roofs, or disinfectants, and both the Barrett Company, and the Dominion Tar and Chemical Company would not touch it; that is to say the lignite tar was of such a peculiar nature that it was not suitable for the processes that they had developed. We are now considering the same tar question with some of the larger chemical companies in Canada with the idea that they may use it for a sheep dip, but it seems at present highly improbable that we shall get any market for it, and consequently we are arranging furnaces under our boilers.

By Mr. Keefer:

Q. At present there is no market for any commercial oil?—A. We cannot afford the cost of any distilling plant to produce the oils.

Q. Somebody else might?—A. It might be, for motor spirit.

By Mr. Cowan:

Q. There are about a thousand things manufactured out of coal tar?—A. Yes, practically illimitable. These lignite tars are of a peculiar composition, very soapy, highly liquid, and they will not distill readily and with surety; that is to say, as you distill and get your various productions off, you come to a point where suddenly the mass congeals and goes into a high char.

Q. Here is a field of operation for your Research Council to discover new methods?—A. It may be; it is a commercial product.

By Mr. Ross:

Q. All you make out of the by-produce will be velvet?—A. Yes. We are prepared to make a contract right away to sell a thousand gallons of lignite tar a day if anybody wants it.

Q. What is a gallon of tar worth?—A. Of lignite tar?

Q. You say lignite tar cannot be used, but supposing it were really good?—A. A good tar is worth, depending on its localities—it depends on the centre of population, around \$10 or \$15 a ton.

By Mr. Cowan:

Q. You say you can use it to burn under your own boilers?—A. Yes.

Q. Why could you not find a market for it in manufacturing places where they have boilers?—A. Because transportation would kill the value.

By the Chairman:

Q. Can you tell us about the value of this for fuel?—A. The B.T.U. content of this is about 18,000. It is a very good fuel.

[Mr. L. R. Thomson.]

By Mr. Cowan:

Q. As a matter of curiosity, can you tell me who owns this plant that you have now built?—A. We understand the three Governments own it jointly and proportionately.

Q. That means that they are going to have to continue this Board continually?—A. It is a matter for the Governments to decide. Our work will be done when we have presented our report, which will include not only the history of the product, but a complete statement as to the processes involved, and the cost.

Q. That is what I wanted to find out about your distribution, because both Manitoba and Saskatchewan are interested in this financially, and I thought it was a proper procedure to distribute it between these two Provinces to retain their support?—A. We shall do so.

Q. And it should be done permanently. As long as I am in the Federal Parliament I will use my influence to get the Dominion Government to continue its support?—A. It is a matter for the Government to decide. As at present constituted, our work will be over when we have presented our report.

By Mr. Keefer:

Q. Do you know of any research work of any nature being put on the tar? You have it there?—A. We have some record of it.

Q. You are not able to state that yourself?—A. No, we produce briquettes for domestic consumption.

Q. Is that not a very important factor?—A. Well, we do not feel so at present, on account of the fact that the disposition of by-products is one of markets, and in the West there is no market for by-products. They may develop some very shortly. People are not accustomed to use fertilizer, and there is no great use for tar.

Q. Is there any prospect of a fuel oil out of that?—A. It may develop.

Q. It has not been experimented on?—A. Some New York people have been on it, but have not got anywhere yet. We have the record of what they have done.

Q. You have not been able with your appropriation to do any work with that?—A. No, we are too much tied up as it is.

Q. Can you tell us how the briquetting industry is progressing in the United States. Is it developing, and give us the amounts there?—A. I think I can give that. In 1920 there were 15 operating briquette plants in the United States, and three in Canada. Nine plants produces 567,000 short tons of it 480,000 from anthracite or semi-anthracite dust, the total output valued at \$4,250,000 or \$7.50 per ton. The Canadian figures are as follows:—

By the Chairman:

Q. Are they increasing the output in the United States?—A. I think on the whole the industry in the United States, as in Canada to some extent, has been the history of those who were more interested in selling stock than in producing briquettes. There has been a good deal of promotion trouble.

Q. They are getting the industry down to a business basis?—A. Yes. An increasing amount of American briquettes is coming into Canada.

By Mr. Ross:

Q. What did you say was the price per ton?—A. \$7.50 per ton approximately.

Q. Would that be to the domestic users?—A. No, at the works.

By Mr. Keefer:

Q. Chiefly those works will be situated where? At the mines, where you could see the product, or where?—A. The Standard Briquette Company, Kansas City, Mo.

[Mr. L. R. Thomson.]

Q. Missouri is not a producing country?—A. No. The Scranton Anthracite Briquette Company, at Dixon City, Pennsylvania.

Q. Is that a producing centre?—A. Yes. Then the Delparen Briquette Company, at Parrott, Virginia. That is producing anthracite. The Pacific Coast Coal Company, at Renton, Washington. That is a producing centre. The Lehigh Coal and Navigation Company at Lansford, Pennsylvania. That is a producing centre. The Scott Briquette Company at Superior, Wisconsin.

Q. These are points where the briquette is handled and reloaded into the cars?—A. Yes.

Q. Where are the Canadian plants?—A. There is one at Banff, or rather at Bank Head, and two are in Toronto. They are the only ones that amount to anything. The C.P.R. plant at Bank Head produced in 1911, 48,000 tons of briquettes, and in 1920, 141,700 tons. In Toronto the A. B. C. Company produced in 1920, 12,000 tons. This company imports anthracite dust from Pennsylvania from the Pennsylvania fields, and its binder is composed half of sulphite pitch and half petroleum pitch. The Nukol Company of Toronto has not furnished any report, and I understand that the Oakoal Coal Company which was organized to manufacture briquettes half garbage and half coal dust has since gone out of business.

By Mr. Maharg:

Q. That scheme has been dropped.—A. That is hearsay. I have not been able to get any authoritative information on that.

By Mr. Keefer:

Q. What do they do with the dust that accumulates in the coal deposits at the head of the lakes?—A. There was a company organized to briquette that at Winnipeg in which Mr. Machray of Winnipeg was interested, but owing to the insufficiency of working capital they ceased operations. The idea was to take the dust to Winnipeg.

By Mr. McKenzie:

Q. About this tar, they used tar on the roads in the west?—A. I have heard that they do, though I cannot recall personally. I saw some streets in Winnipeg with tar.

Q. Do you know whether the tar which would be produced would be suitable for the roads?—A. It is claimed not.

By Mr. Keefer:

Q. You spoke of the tests, including the water test.

By the Chairman:

Q. Sometimes they use flour as a binder?—A. The Board has had great success with that. We have tried out one or two of the West wheat products as red-dog. I understand that that is the local name for low grade wheat screenings in which there are deleterious seeds, such as mustards.

Mr. MAHARG: That is commonly called Indian flour.

WITNESS: We use red-dog and some of these screenings that the Government will not allow to be sold in Canada. We had rather interesting results in our binding experiments. One part of our low grade screenings would replace two parts of the coal tar pitch, within very narrow limits. For example, instead of using a 10 per cent binder we use what is termed a mixing ratio, for our binder. To 100 parts of the carbonized lignite we add so many parts of binder. This figure is termed the mixing ratio. Then for example we discovered that we could make a good briquette, with coal tar pitch—MR₀ weed screenings—MR₂. It looks like a commercial proposition, and when we get production actually started it will prove the most hopeful substitute we have struck.

[Mr. L. R. Thomson.]

By Mr. Ross:

Q. Coming to Ontario, do you think that these briquettes will ever be commercially valuable?—A. Not at the present freight rates.

Q. I mean as a substitute for anthracite?—A. Not at the present freight rates.

By Mr. Cowan:

Q. Apart from that?—A. As a physical proposition?

By Mr. Ross:

Q. There are other features as well. If the cost of production is reduced, or if you are able to save your by-products, they might be made valuable to Ontario?—A. Perhaps, but I think the decision in that would rest on purely economic grounds. First, you have the physical characteristics of these briquettes as compared with the physical characteristics of anthracite. They are competing products. This is almost as good as anthracite, and the question is how much less are you willing to pay for this, or how much more. In addition, you have the freight rates. It is purely an economic question. In Toronto the anthracite briquettes have a ready market at from 0 cents to \$1 or \$1 or \$1.50 per ton less than the ruling price of anthracite.

Q. In Western Ontario they are selling at very much less than that. We could buy briquettes last winter for \$16 per ton, and we were paying \$22 and \$23 per ton for coal?—A. A margin of \$6 or \$7.

Q. That was for a briquette about the size of an egg which made a good clean fire but not so intensely hot as anthracite. I think they came from the States?—A. I do not know what briquette you may have been using. I know that the manager of one of the briquette companies in Toronto told me the other day that he had no difficulty in getting a sale for their briquette at a spread of \$1.50.

By Mr. McKenzie:

Q. Am I right in saying that the quantity of anthracite coal consumed in Ontario is 16,000,000 tons?

Mr. KEEFER: No, 3,000,000.

By Mr. McKenzie:

Q. Supposing the people of Ontario made up their minds to discard anthracite coal and take your briquettes instead, what capital would be necessary for you to equip yourselves to fill that gap, to supply briquettes in place of anthracite—for the present not mentioning the price—to produce a sufficient quantity of briquettes to take the place of the 3,000,000 tons of anthracite?—A. I could only give a very rough figure. Leaving out any working capital, you can take the figure of \$250,000 for a plant of 200 tons capacity a day.

Q. That is a somewhat small capitalization?—A. But that is not for lignite. I am speaking now of a plant to buy anthracite dust and briquette it.

Q. With a plant that you can produce for that amount of money, would you be able to supply a market of that size, to take the place of the 3,000,000 tons of anthracite?—A. I do not quite follow the question.

Q. It is said that in Ontario to-day we are consuming 3,000,000 tons of anthracite coal, hard coal. We are talking of living within ourselves, so to speak, and of getting along with such material as we have in Canada, one of the things that could be done would be to substitute these briquettes, which you are making, for anthracite coal. Supposing the nation made up its mind that they were not going to take any more fuel in the shape of anthracite, but were going to buy your briquettes, what I would like to know is, what capital would you require to equip yourselves in

[Mr. L. R. Thompson.]

order to supply that market? Do you understand that?—A. I understand it, but I am afraid I cannot answer it. The figure that I quoted, \$250,000, was for a plant that imports anthracite dust like the A.B.C. in Toronto. We would have to put in dryers of a very much larger capacity and carbonizers.

By Mr. Ross:

Q. Which would be much more expensive?—A. Carbonizing lignite is much more expensive.

Q. The quantity annually produced in that plant would only be 60,000 tons a year?—A. Yes.

Q. So it would take 50 such plants to supply Ontario with 3,000,000 tons?—A. Yes.

Q. And according to what you say, the erection of a plant such as you say would be necessary would be more expensive than \$250,000 because you would need more machinery?—A. That is of course a very rough estimate, just given on my general knowledge.

By Mr. McKenzie:

Q. Supposing the people of Ontario were willing to pay the price, would you be able, would you be in a position to produce the article?—A. Do you mean technically, with the technical information we have?

Q. Let me illustrate. A merchant in Toronto is getting 10,000 pairs of boots from a man in the United States, and I as a Canadian traveller go to him and say "up this Yankee fellow and take your boots from me." The first thing he would ask me would be, "Can you furnish the boots?" Suppose we say to the Americans "We do not want your anthracite, we are going to get along with lignite briquette from Saskatchewan," can Saskatchewan produce the goods?—A. There is an illimitable quantity of this lignite in Saskatchewan.

By Mr. Cowan:

Q. The only thing necessary is additional plants?—A. That is all.

By Mr. Ross:

Q. These plants would cost \$12,500,000 on that basis, and from what you said by way of supplement it would cost perhaps more?—A. That was just a rough estimate that I had in mind for an anthracite dust plant such as has been erected in Toronto by those two companies.

By Mr. McKenzie:

Q. They are importing this dust?—A. Yes.

Q. The idea is to get along without importing anything in the shape of fuel, and what I want to know is what your people can do in the shape of producing a substitute?—A. There is an illimitable supply of this lignite and if the capital can be found and it is economically feasible, the whole world can be supplied.

H. M. E. KENSIT, called, sworn, and examined.

By the Chairman:

Q. What is your position in the Water-Powers Branch in the Dominion here?—A. Electric Power Engineer.

Q. How long have you occupied your position?—A. Since 1912.

[Mr. L. R. Thompson.]

Q. What was your experience before that? A. I have been concerned in the electric power engineering for the last thirty years, both in Great Britain and in Canada. I was for several years with the firm of Smith, Kerry and Chase, in Toronto, reporting and examining on various power projects. Shortly after that I joined the Dominion Water Power Branch.

Q. You have a statement you wish to present to the Committee?—A. Yes, I have a statement here.

The CHAIRMAN: I might explain to the Committee that we arranged with Mr. Kensit, who has a great deal of information to present to the Committee, to prepare his statement in a form in which it could be inserted in the record, and unless the Committee desires him to read it, we shall have it placed in the record.

WITNESS: Mr. Chairman, and gentlemen, I desire on behalf of the Dominion Water Power Branch to put before you a few particulars regarding the relation between our developed and undeveloped water-power and coal consumption. We have put together particulars on this subject in a condensed form, and in the form in which we thought they would be most useful to the Committee. I have statements here covering it, and I have also some large scale diagrams. I do not propose to read the statement, but I should like to read to you some extracts from it in order that you will get a general view of the position, the relation between water-power and coal, and then with your permission I should like to pin up the diagrams on the wall, and that I think will give you a fairly complete view of it. I think you will find the diagrams very interesting. Now this statement is illustrated with tables and diagrams which make the thing clear, but it cannot be read in that form, and I propose to read to you some extracts from it so that you will get the situation before I put up the diagrams, if that is agreeable to you.

The CHAIRMAN: Yes.

WITNESS: I will put in the whole of it, so that you will have it all in the record.

NOTE.—For the full report of the following condensed statement see appendix at back of this book.

CONDENSED STATEMENT

This statement shows first a table of the water-power developed per capita in Canada and in the United States from which it will be seen that Canada has developed 194 per cent more water-power per capita than the United States and it proceeds to show how greatly this has relieved the coal situation in Canada.

The "Acute Fuel Area" is defined as those portions of Canada producing little or no coal and more or less dependent on imported supplies, and is shown on Plate II. Saskatchewan is only included on the map because it does import a small quantity of United States coal. The real "Acute Fuel Area" consists of Quebec, Ontario and Manitoba and this area uses 59 per cent of the total Canadian coal consumption and imports 94.5 per cent of that amount.

It is precisely in this area that the bulk of the great water power resources of Canada are situated, as can be seen from Plate 3. This diagram is arranged by provinces, showing the coal consumption and water power available in each and the coal equivalent of that water power—this has been taken at 10 tons per H.P. year.

An analysis of the principal uses of coal throw considerable light on how the consumption thereof is affected by water-power development. This has been dealt with in the statement, in comparison with the United States and the United Kingdom, in two ways, first showing the percentage used for each of the principal purposes to the total used for all purposes, and secondly the use per capita for different purposes.

The most striking figure in the first table is that showing the burden of the railways, due no doubt to the great length in proportion to the population.

The proportion of coal used for railway purposes is 50 per cent greater in Canada than in the United States, and 430 per cent greater than in the United Kingdom.

The coal used per annum by railways in Canada is about 15,000,000 short tons, and in the United Kingdom 15,000,000 long tons, a difference of 12 per cent, but the respective populations served are 9,000,000 and 45,000,000.

This may well be described as the burden of the railways in Canada and leads on to the question of railroad electrification by means of the abundant water-power available; this is further referred to in the statement.

Electric power plants in Canada are mainly operated by water-power; in the United States largely by coal; in the United Kingdom almost entirely by coal. In consequence the percentage of coal so used is 73 per cent higher in the United States and 545 per cent higher in the United Kingdom than in Canada.

In the second Table it is shown that the use of coal per capita is 159 per cent greater in industries and 150 per cent greater in electric power plants in the United States than in Canada and that the general average of coal used per capita is 50 per cent higher in the United States than in Canada.

It appears obvious that there is a direct relation between this fact and the fact that the water-power developed per capita in Canada is 194 per cent greater in the United States. Furthermore it appears reasonable to assume that, especially in view of our colder climate, if this water-power development had not been made, the total consumption of coal in Canada would be 50 per cent.

Fifty per cent on the present total consumption is 17,613,000 tons, which, at an average price of \$8.32 per ton amounts to \$146,500,000 per annum, and this represents the nature of the additional annual sum that would have had to be spent on foreign coal and freight if this water-power development had not been made.

This applies to the present time. It would not have been as large in the past but it will be greater in the future, both from the increase in consumption and from the probable increase in the average cost of coal, as shown in the following paragraph.

Future price of Coal.—The Progress Report of the United States Super Power Survey, dated February 24, 1921, and addressed by the Secretary of the Interior to the President of the United States, states as follows:—

“A conference with the coal authorities indicates that a fair figure for the average price of coal during 1919 was \$2.90 at the mine and that during the period from that date to 1920, \$3.50 per ton.”

This appears to indicate that the average price for the next ten years will be over 20 per cent higher than in 1919.

Capital invested in water-power.—The approximate total of water-power now developed in Canada is 2,459,200 H.P. and: “the average investment per installed water horsepower is \$217” (Dominion Bureau of Statistics), so that the total capital expended on water-power development is approximately \$534,000,000.

This represents money invested in a home industry and of that investment over 83 per cent or \$445,000,000 is within the acute fuel area.

But for this investment for this particular purpose, it appears, as shown on page 9, that Canada would now be expending some \$146,500,000 per annum for additional imported coal.

It therefore appears that, owing to the new high level in the cost of coal and its probable continuance, the saving in imported coal due to water-

power developed is, from the national point of view, now equivalent to 27.5 per cent per annum on the capital that has been invested and that has rendered that result possible.

To exhibit the present and future situation at a glance, two diagrams have been prepared to show the relationship between coal consumption and water-power development from 1907 and 1920 and the estimated relationship up to 1930.

These are Plates V and VI. The first shows the effect of water-power development on coal consumption taking all classes of coal into consideration. As time is pressing I will pass on to plate VI, which gets nearer to basic conditions as it considers only the classes of coal that can be or are at present affected by water-power development.

In considering the effect of water-power development on coal consumption, it must be remembered that the use of anthracite coal for house heating is not affected thereby and that the use of coal for locomotives is not and will not be affected unless electrification takes place.

Plate VI therefore shows the relation of developed water-power to the consumption of bituminous and lignite coal, both native and imported, but excluding that used for locomotives.

It will be observed that the line of "Coal equivalent of Developed Water Power" caught up and passed the line of native soft coal consumption in 1908 and passed the line of totals soft coal consumption in 1913 and is still well ahead of both in spite of the hindrance to the financing of water-power projects due to war and post-war conditions.

In estimating increases up to the year 1930 it will be observed that the increase in water-power development is assumed not to be greater than that during the war and post-war period and that increases in coal consumption are shown as the projection of the line joining the consumptions of the previous eight years.

It will be seen from this diagram (plate VI, page 16) that, in spite of the financial conditions that have hindered development since 1914, the "Coal equivalent of Developed Water Power" was greater than the total soft coal consumption (less than for locos) in 1920 by $12\frac{1}{2}$ per cent, and by 1930 it should be 40 per cent greater.

It may be well to repeat here some of the points previously brought out in order that they may be considered together with the foregoing:—

The consumption of coal per capita is 50 per cent less in Canada than in the United States, due mainly to the water-power development per capita being 194 per cent greater in Canada than in the United States. Otherwise the colder climate might be expected to lead to an opposite result (page 9).

The resultant saving in coal is now equivalent to \$146,500,000 per annum (page 9) and, due to the new high level in the cost of coal, this sum is, from the national point of view, now equivalent to a return of 27.5 per cent per annum on the capital invested in water-power developments (page 10).

The total water-power now developed in Canada is 2,459,200 h.p., and the capital so invested is about \$534,000,000, of which over 83 per cent is within the acute fuel area.

The foregoing particulars have been prepared to show the influence of water-power development in economizing the consumption of fuel, both in past results and as regards the future. It is submitted that the actual results so far secured amply demonstrate the value and importance of this source of power and fuel economy, and the necessity of further promoting such development by all possible means.

Now I would like to put up the diagram.

[Mr. H. M. E. Kensit.]

Mr. COWAN: It looks to me as if Canada has done a whole lot more than I ever dreamed of in this respect. The saving of \$150,000,000 a year is a big thing.

By Mr. Keefer:

Q. When you have endeavoured to give us the capital invested, you have taken the capital invested from what?—A. From the figures of the Dominion Bureau of Statistics.

Q. You do not know how much is actual capital or how much water?—A. No.

The CHAIRMAN: Have you any questions to ask Mr. Kensit?

By Mr. Blair:

Q. That \$217 per horse-power, does that include transmission?—A. That includes transmission, yes sir, and sub-stations and receiving stations; everything except the actual distribution in cities.

Q. Can you give us the undeveloped horse-power in Manitoba, Ontario and Quebec?—A. The undeveloped power is given in each case in the diagram. The figures are in the statement, and the diagram itself is there.

By Mr. McKenzie:

Q. Mr. Kensit made a comparison of the horse-power used in the United States with the power used in Canada?—A. Yes, sir.

Q. What do you take as your fixture for horse-power? You say that there is a larger per capita of power used in the United States than in Canada?—A. Yes, per capita. There is a larger development in Canada per capita of water-power than in the United States, 194 per cent greater.

Q. But taking the water-power, steam power, and motor power—call it horse-power, if you like—how does it compare per capita in the two countries?—A. I cannot give you that, I have not taken it out for all uses of power. I have figures for water-powers but I have not taken it out for all powers, including steam.

Q. When you figure out that there is more power actually used in the United States per capita than is used in Canada, are you safe in saying that the ratio of difference is the cause of the greater use of water-power in Canada?—A. I think so. I had that figured out in considerable detail for all the principal uses of coal, for Canada, United States and the United Kingdom, showing where the excess is in the principal uses of coal. That is in the statement that I have handed in. I could show you the tables now, which give it in more detail.

Q. Supposing you found that in the United States the per capita ratio is say 100 horse-power for each man, woman and child in the United States. That may be a ridiculous comparison, but supposing that you had for every man, woman and child in the United States a use of 100 horse-power, of motor power; there may be a very much smaller ratio of power or a larger ratio for our population. If it is 100 horse-power per capita in the United States, it might be larger or smaller in Canada?—A. Yes, that is so.

Q. But we have no means of knowing whether we require as much water-power in Canada as they require in the United States, because the industries, the volume of horse-power or water-power that you require in any country depends largely on the multiplicity of the industries, does it not?—A. Yes.

Q. Would you be prepared to say that compared with the population, they have many more industries in the United States than we have?—A. They have more, I believe, it is more of a manufacturing country.

Q. And they would use more motor power than we do?—A. But that is all concentrated in a very small part of the country.

[Mr. H. M. E. Kensit.]

By Mr. Cowan:

Q. I do not think that that states the case fairly. I say that the number of industries would depend on the productiveness of that country, and if you develop your water powers you are going to have more industries?—A. Decidedly.

Q. It is up to us to use the powers we have to make an industrial country?—A. The statement by American authorities is that the water power is scarce in the districts where their industries lie, that is in the Eastern district, between Washington and Boston. That is the district where the larger proportion of the industries are concentrated, and that is the district in which they are obliged to use coal because they have not sufficient water power to do the work even if it were all developed.

Q. The situation in Ontario and Quebec, with the enormous water powers they have is that if these water powers were developed these two provinces could become the biggest manufacturing part of this continent of America?—A. It is possible.

By Mr. McKenzie:

Q. Dr. Cowan does not seem to understand my question. You say we use less coal per capita in Canada than in the United States?—A. That includes all uses, the total returns by the United States Government.

Q. And you ascribed that difference to the larger development of water power in Canada?—A. Yes.

Q. What I want to know is whether we are safe in reaching that conclusion, that that is the reason?—A. If you read the whole statement I think you will find it quite convincing on that point.

Q. It is running in my mind that the reason is that they have more industries in the United States than we have and consequently burn more coal.

By Mr. Cowan:

Q. You are on the Water Power Board?—A. The Water Power Branch of the Department of the Interior.

Q. They have a Board, have they not?—A. There is a Dominion Power Board.

Q. Is it a paid body?—A. Yes, some of the officials are paid, but that is an advisory body, and the Dominion Water Power Branch is an executive branch for water powers under the jurisdiction of the Department of the Interior. The Dominion Power Board is an advisory and investigating body, not an executive body.

Q. They are not paid?—A. They have a paid staff.

Q. The Board itself?—A. The Board itself is not.

Q. It gives its services gratuitously to the Dominion Government?

Mr. COWAN: I just wanted to find that out.

By Mr. Keefer:

Q. The Power Board are different engineers from different departments who are officials of the Federal Government?—A. Yes.

Q. And they advise on these problems?—A. Yes, and the Dominion Power Board is under the chairmanship of the Minister of the Interior. It is made up of prominent officials from each of the departments that have any relation to power, either water power or fuel power, that are concerned in this matter.

Q. It looks as though it might be a very satisfactory arrangement?—A. Yes.

The Committee adjourned until 10.30 to-morrow.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

FRIDAY, May 13, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will the committee come to order? The announcement was made at previous sessions of the committee that we were to have Mr. Arthur White of the Conservation Commission before the committee. Yesterday afternoon the clerk received a telephone message from the Conservation Commission Department stating that Mr. White had gone to Toronto yesterday, and would be unable to appear before the committee to-day. That is all the information we have, except that he is not here. I might say just at this moment that early in the history of the committee Colonel Peck of British Columbia spoke to me and made the request that Mr. Scott of Quebec be heard in connection with the Skeena River coal district. I said we would endeavour to comply with his wishes if possible, but as time was very valuable we might not be able to give him a date. No arrangement was made for hearing Mr. Scott, but Mr. Scott was called before the Senate Committee and appeared before them yesterday—the Senate Committee on Natural Resources—sitting in the city yesterday and to-day, and he is here now, if the committee desires to hear him. I told him that we would endeavour to give him some time before the committee on that very interesting field in Northern British Columbia which has just opened up.

Now there is another matter. As you are aware the committee a few days ago decided to despatch a further telegram to the coal operators in Nova Scotia regarding the attendance of their auditors. This was the telegram sent by the clerk:

Ottawa, Ontario, May 11, 1921.

D. H. McDougall, Esq.,
Vice-President, Dominion Coal Company,
Montreal, Quebec.

"At meeting of Fuel Committee this morning I was instructed by committee to require you to have your auditors McCall and Gordon with the necessary documents appear before this committee not later than Friday the thirteenth instant at ten thirty o'clock at room four hundred and twenty-five House of Commons."

Yesterday afternoon, the following telegram was received by the clerk:

Montreal, May 12, '21.

Thos. Howe, Secretary Parliamentary Committee on Fuel,
Ottawa, Ont.

"Your telegram received. We are submitting matter to our legal advisers and will reply after they have given consideration. In view of changed conditions I have withheld letter to Dr. Steele mentioned in my telegram May 10th."

D. H. McDougall.

Following that matter up, I understand that Mr. Chrysler, K.C., of Ottawa, is present to-day and desires to make a statement to the committee on behalf of the coal operators. Is it the wish of the committee that Mr. Chrysler be heard?

Mr. COWAN: Yes.

The CHAIRMAN: Will some one make a motion to that effect?

Mr. COWAN: I move that he be heard.

The CHAIRMAN: It is moved by Mr. Cowan, seconded by Mr. Blair, that Mr. Chrysler be heard on behalf of the coal operators.

Mr. F. H. CHRYSLER, K.C.: Mr. Chairman and gentlemen of the committee, I prepared a statement because I wanted to be careful in anything I might say, as the matter is a delicate one in many respects. The attitude of the companies is that they desire to comply as fully as possible with all the demands of the committee, and to afford them every reasonable information. At the same time, they are not prepared, this morning at all events, to comply with the request contained in the resolution of the committee made on 26th April last. This is the statement I have prepared. (Reads)

"I am instructed to appear, before this Honourable Committee of the House of Commons as counsel for the Dominion Coal Company and the Nova Scotia Steel & Coal Company, in reference to a telegram which Mr. McDougall, the president of the Nova Scotia Steel & Coal Company has received. I have not seen the telegram, but I understand that, in substance, it requests Mr. McDougall to have the auditors of the Dominion Coal Company attend the committee for the purpose of producing the documents mentioned in the resolution of the committee adopted on the 26th April, 1921."

At page 261, of the official report of the evidence, taken before this committee, on that day, the original resolution and the supplementary resolution, are printed.

The original resolution is as follows:—

"That coal operators called as witnesses by this committee be obliged to furnish the committee with detailed monthly statements from 1912 to date, of the cost of production of coal per ton showing therein all items separately entering into such cost, said statement to be certified by their auditors."

The resolution, adopted on the 26th April, is as follows:—

"That the auditors of all coal companies appearing before this committee do personally attend with the original cost sheets mentioned in the resolution April 21, for the purpose of examination thereon."

The second resolution varies from the first, in calling upon the auditors of all coal companies appearing before this committee to personally attend with the original cost sheets mentioned in the resolution of the 21st April for the purpose of examination thereon.

The original resolution did not, in terms, mention the original cost sheets, but referred to detailed monthly statements from the year 1912 to date, and the companies understand that the second resolution is intended to supersede the first.

The original cost sheets, referred to in the later resolution, are monthly statements, prepared for the operating purposes of the company, showing for each mine the expense of operation of that mine during the month, including all work within and without the mine connected directly with operations at such mine. They show only the cost of operation of that mine, and do not show, with any accuracy, the cost of producing and marketing the company's coal, nor any of the other elements of cost except labour and material at the mine.

The companies are not, at present, able to say whether the original cost sheets of all the mines, or of any of the mines, from 1912 to 1920, have been preserved.

Assuming for the present purpose that these original sheets, the returns for nine years back, which have been asked for, are still in existence, and that the statements are compiled monthly, there will be 108 statements in all for each one of about thirty mines, making a total of 3,240 statements.

It is impossible, in the time which has been afforded by the committee, for the auditors to ascertain the existence and to collect and bring here these statements.

[F. H. Chrysler, K.C.]

In any case, the companies respectfully submit, for the consideration of the committee, that cost sheets of the character described, are not relevant for any purposes of the committee, in connection with the question which has been submitted to them by the House, namely "an inquiry into all matters pertaining to the future fuel supply of Canada."

The evidence, before the committee as given by many witnesses shows that conditions as to expenses of operating have changed in so many respects since 1912, that if the figures of these earlier years are used for comparison, they would be unfair to the companies and misleading for the purposes of the committee.

Besides the original cost sheets only show, for the purposes of operation, the work and material expended at each mine for the period of one month, and vary from month to month, from year to year, and from one mine to another, so that any inferences drawn from these separate statements would be inaccurate and would not assist the committee in ascertaining the actual cost of producing coal in the mines operated by the companies in question.

The companies respectfully submit that such partial and erroneous information given to the public would not only be misleading to Parliament and to the public, but would be extremely injurious to the interests of the coal industry and to the future of the mining industry in Nova Scotia.

If the committee, on further consideration decide that further information, as to the financial position and costs of production at the mines is required and that such information is within the terms of the resolution by which the committee was appointed, the companies respectfully submit that the inquiry should be made applicable to similar costs of all the operators, whether companies or individuals who are operating in competition with these companies, in Canada, and in the United States, and that the same information should be required from all such operators at the same time.

The companies respectfully submit to your honourable committee, that they have not had sufficient time, since the telegram from the chairman was received by Mr. MacDougall, to ascertain whether the monthly statements asked for are now in existence, nor how long it will take to obtain them.

When the statements have been obtained, if in existence, the companies respectfully ask that they be given time to submit the statements and any questions, with regard to their production, for legal advice, before any further action is taken to compel their production.

In any case, in whatever form this honourable committee see fit to pursue the investigation, the companies respectfully submit that this committee should not undertake an investigation into the financial affairs of these two companies without giving the companies an opportunity of considering their position and being heard before this committee, after the committee has definitely decided what information is required.

That is all, Mr. Chairman, and I submit this for the consideration of the committee.

The CHAIRMAN: You have heard the statement of counsel for the coal operators, what is the desire of the committee regarding it.

Mr. CHISHOLM: It is quite evident they are not sure whether or not they have these statements. It is quite evident they are not in transit yet.

Mr. COWAN: It is quite evident to me that if the statement of counsel is correct the company is not doing business in a business-like way. Any company doing business should have this information. I consider it necessary, if we are going to conduct our enquiry, that we should know something about the cost of producing coal in this Canada of ours, and I think that these cost sheets should be produced.

Mr. CHISHOLM: They cannot produce what is not obtainable. If their contention is correct, that they have not got these documents—they do not assert that, but they say it is questionable whether they have them or not—if they have not got them we cannot make them produce them.

[F. H. Chrysler, K.C.]

Mr. COWAN: It appears to me that this company has been simply evading, and nothing else, and I do not like being toyed with at all.

Mr. MAHARG: Is there a representative of these companies here who can speak for the company?

The CHAIRMAN: Not to my knowledge. I understand Mr. Chrysler appears at the request of the company to present this statement on their behalf.

Mr. CHRYSLER: Yes.

Mr. MAHARG: He has not been treated as a witness before the committee. He has given us a statement here of a procedure that we have followed with the witnesses preceding him from the start of the enquiry. I thought he was just presenting a statement on behalf of the company. I presume he was, but I would like to know if Mr. Chrysler is prepared to take the witness stand as an ordinary witness and answer questions on behalf of the company. We cannot get anywhere unless we have that opportunity.

Mr. CHRYSLER: Certainly not. I am counsel only, and I am not a witness.

Mr. MAHARG: That is what I wanted to find out. Is there a representative of either of those companies here who can take the stand and answer questions in regard to the matter referred to by Mr. Chrysler—not on the general condition of the mine or anything like that.

The CHAIRMAN: Not to my knowledge. Mr. Chrysler is the only one whose presence I have been advised of. I did not consider it necessary to swear him as a witness, because he was not appearing as a witness. He is merely making a statement to the committee as counsel for the company.

Mr. COWAN: By not appearing here they have refused to obey the summons which this committee issued, and I think they should be treated like anybody else who refuses to obey the summons—that is we should report back to the House, and let the House deal with it.

The CHAIRMAN: What is before the committee is a statement of their reasons for not presenting to the committee the information asked for.

Mr. McKENZIE: There is only one course open to us if we do not accept that statement; that is to refer the matter to the House for instruction, and let the matter stand. We have no power to compel, or to take any drastic action to compel anybody to come before us. If anybody refuses our ordinary request to come here, we have to refer the matter back to the House for such action as the House may deem advisable.

Mr. ROSS: That is the point I am in doubt about.

Mr. McKENZIE: There is no doubt about it.

Mr. ROSS: There is to my mind. I am seeking information now. I respect your opinion very, very much, but have you taken any advice, Mr. Chairman, as to whether we have any power in our submission to call witnesses and ask for papers and documents? I would think that power was delegated to us by the House to take action ourselves, but I do not know the practice. Do you know the practice and powers of the committee in that respect? Is there anything in the rule?

Mr. COWAN: If the reference is not wide enough, then we must ask for more extended powers to get what we want.

Mr. McKENZIE: The practice is well established; refusing to appear before this committee is of the same class of offence as refusing to answer after they do appear. Everybody will understand that. Having witnesses come here, and after they come here refusing to answer, is an unfortunate condition. Our course then is to report to the House, the witness is subpoenaed before the Bar of the House, and he is dealt with, possibly imprisoned. We have had witnesses in this House since I have been a member

who have refused to answer questions, and they were reported to the House and summoned before the Bar, and then imprisoned. There is no difference between refusing to come and refusing to answer when they do come. The procedure is the same. They are summoned to the Bar of the House—

Mr. BLAIR: By the committee?

Mr. McKENZIE: By the Speaker of the House. I am sure Dr. Steele was here when one man was imprisoned in the tower for three or four months.

The CHAIRMAN: I would not like to express an opinion of the powers of the committee as regards compelling witnesses to attend.

Mr. HOCKEN: Why could it not be referred to the Justice Department for a decision?

The CHAIRMAN: The greatest doubt I have—

Mr. McKENZIE: I have told you what has been done in such cases.

The CHAIRMAN: The greatest doubt I have in the whole matter is as to whether this committee, under the reference, is within that reference when we are asking the coal operators to present to this committee the cost sheets of the company or has the power to compel them to do so, or whether this committee is within that reference when we are asking the coal operators to give to this committee the cost of producing coal. Now, that is a matter which I quite admit would be open to argument. I am quite sure that as the mover of the resolution, asking for this committee, that I had no thought that that would be included in the reference. I do not believe the House of Parliament had in mind that it would be included in the reference when this matter was referred to a committee. As I said before this committee would require technical experts. That is the experience of the Fuel Controller when he attempted to go into this matter, and it was the experience of the Federal Trade Commission of the United States, when they went into it—they had to have a large staff of experts who were qualified to give accurate information on the matter. No Parliamentary Committee, I think, should go into any subject on which they cannot get thorough and complete information. We do not want inaccurate information to go out from this committee.

Mr. COWAN: Precisely, and that is why we want those books.

Mr. DOUGLAS (Cape Breton): We asked them to produce the original papers. What more accurate information can you get?

The CHAIRMAN: I started out with the statement that I had the gravest doubts as to whether it was within the reference of the House to this committee that we had the power to go into these matters.

Mr. ROSS: Mr. Chairman, if we are going to find out whether fuel is available for the province of Ontario—which was the chief object of your motion—we have to find what the costs of production are in Nova Scotia, and if we are going to get the costs of production of coal for sale to these people in Ontario, we have to find out what their profits are, and if we are going to find out what their profits are, and what their costs of production are, who is better qualified to tell us than the officers of the company. It seems to me they are simply trying to evade this proposition, and I think they should be brought to time. They have said within the last two weeks that they have no objection to doing it, and to be frank with you I cannot see why they should turn about now and endeavour to evade the issue as they are doing. It seems to me we should report the matter back to the House and get the authority to have them brought there. I do not say that these statements should be put upon the record, but this committee should know at least what the cost of production is for the production of coal by these two companies.

Mr. COWAN: The whole question from beginning to end has created a suspicion in my mind that they have something to conceal, and this action fully confirms it.

Mr. Ross: From their own standpoint, I would say they are acting unwisely, because they are arousing suspicion in the minds of the public that they are profiteering with regard to coal.

Mr. DOUGLAS (Cape Breton): One of the very first things Mr. Wolvin did when he was invited to appear, or have his auditors appear before the committee was to write back to the committee and ask us if we wanted the auditor from Price-Waterhouse Company, which to my mind was preparatory to evading this whole question. They have had ample notice.

Mr. KEEFER: It is my individual opinion of the matter—in the first place the reference to this committee is as follows:—I have it before me: “To inquire into all such matters pertaining to the future fuel supply of Canada with power to send for persons, papers and records, to examine the witnesses under oath, and report from time to time.” We have the power to send for witnesses and papers; we have sent for these witnesses and papers and the witnesses do not attend. They send their counsel here and give reasons why they do not attend. That is not obeying the directions of this committee, and I think we should insist, when asking witnesses to attend here with papers, that they so attend, otherwise the dignity of Parliament, and the dignity of a parliamentary committee is lost. As to prying into the private affairs of the companies: That is not an object of this committee. Neither does any member of this committee wish to pry into the private affairs. We are not here to ascertain whether these companies are profiteering or not, but we are here to inquire into the future fuel supply of Canada; the future supply of coal for Canada is clearly before us, and we have learned that it comes from two sources, one in the West, and the other in Nova Scotia, outside of the United States. It does seem to me a very important factor in the supply is the cost of that coal. When you say “cost” you mean a reasonable profit. I think it is very bad judgment on the part of this company to do as they are doing, but we have nothing to do with that, and that will not assist us in this respect, and I think we cannot very well report to the House unless we know in a reasonable way—not necessarily accurately—the cost of the coal, so it would be a factor in the future supply. I do not believe for one moment that we should pry into the affairs of the company under this reference, neither does any one contend that it is a question for examination whether they are making undue profits or not. They are entitled to make all the profits they can, and during the last two or three years, they have had a splendid opportunity on account of the foreign demand for coal, but what we want to get at is the future fuel supply of Canada, and that is and must be necessarily coupled up with the cost of that coal. I think we ought not to abandon that point entirely, and the witnesses should be summoned to attend here to answer questions and give their reasons why they object, and if they do not want to answer, or if they refuse to answer, then we can report the matter to the House, and the House can decide what it wants to do. I do not think we should back up on what we have decided to do. I do not see any reason for doing so. I have always an open mind to reconsider a question, but I have not seen anything yet, outside of the possible detriment to the company, which we do not want, to prevent us from insisting upon these costs being produced.

The CHAIRMAN: As chairman of the committee, I feel my responsibility, and I have endeavoured to keep the views of the committee apart from my own personal views, and to keep the committee proceeding along consistent lines. We had the representatives of the coal operators of Alberta here, one of whom, I understand—I may be mistaken on that—is also a coal operator. We have asked to be heard to-day a coal importer from British Columbia and a motion was passed by this committee that each of these gentlemen should be presented to this committee, and present to this committee their costs sheets. We ignored the western coal operators in that, but got after the Nova Scotia Steel Company and the Dominion Coal Company very vigorously, and what I wish to impress upon the committee is that we should follow

a consistent plan, and adopt the same policy with every person. If we are not prepared to adopt this policy with every coal operator that comes before the committee, why should we follow it with the two coal companies mentioned with such activity and energy? I do not think we should use one coal operator differently from another coal operator. My own view is if we are going into the cost of producing coal, we should take the time to go into all the costs of production of every coal company in the country so as to put them all on the same basis, and put them in the same light before the public. Not only that, but endeavour to get the cost of production of every coal operator trading in Canada, so that there will be no unfairness, no discrimination between the coal operators. If we are going to do that, then I think the policy of the committee would be quite consistent, but unless we are prepared to do that, it seems to me we are acting inconsistently.

Mr. DOUGLAS (Cape Breton): I agree with what you have stated, Mr. Chairman, that every company should be treated exactly the same, but I do not think it is inconsistent for us to ask this information from the largest producer of coal in Canada. They were the first people called before this committee. That is the position that has been taken, and not only that—

The CHAIRMAN: Let me point out, Mr. Douglas, that the motion was passed by the committee that coal operators appear before the committee, and we are summoning such coal operators as we choose.

Mr. DOUGLAS (Cape Breton): For the time being, but we are summoning first the largest coal operator and the largest producer of coal, and the company which largely sets the price, particularly so in Eastern Canada, and the company that controls, as has been established here in evidence, eighty-five per cent of the output of Eastern Canada, so I think it is a very consistent position for us to take to say that the largest producer might properly be the first person called.

The CHAIRMAN: That is not the policy of the committee as represented in the resolution we passed.

Mr. COWAN: I quite agree that there should be no discrimination in this matter, but let me point this fact out, that the Alberta men appeared, and gave their evidence, and they showed conclusively that it cost little more than five dollars per ton at the mines. But when we come to the Nova Scotia operators, we find it was costing them about two dollars a ton more, and yet the evidence went to show it was more costly to mine coal in British Columbia and Alberta, than it was in Nova Scotia, by thirty per cent. Then the question came up "Why is it?" and then we found it necessary to ask for these costs sheets. They may not be all that is desired, but they will tell us the actual cost, and I cannot see why we should not know what the cost of coal is. I do not know how we could report the future policy on the part of the Federal Government to further coal mining in Canada unless we know the cost, and I venture there is not a Government in the civilized world who does not know to-day what it costs to produce coal in their country except the Dominion of Canada, and I do not see why we should not know.

The CHAIRMAN: May I interject this remark? These things, as I understand, are accumulated in the office of the Fuel Controller of Canada. These things have all been given to the proper authority.

Mr. ROSS: Then, we had better summon him. Perhaps a short cut would be to summon the fuel controller.

Mr. CHISHOLM: You say the fuel controller has all of this information?

Mr. ROSS: I do not see why he was not summoned before this.

Mr. CHISHOLM: Are you prepared, Mr. Chairman, to say that the fuel controller's information is accurate?

Mr. COWAN: Hear, hear. That is the point. How did he get it?

The CHAIRMAN: Gentlemen, are we to admit that we have so little confidence in our fellow men as to say that in a body like the fuel control body, they are giving out inaccurate information? They have employed a staff of experts to go over these things, in order to ascertain that there were no inaccuracies in them?

Mr. KEEFER: Would they have the costs for all over Canada?

The CHAIRMAN: I am not sure of that.

Mr. KEEFER: I think they would. Why not get them before us?

The CHAIRMAN: That is my opinion.

Mr. KEEFER: Let us get down to the bottom of this, and hold this thing in abeyance. We must not decide the matter unnecessarily, one way or the other to-day. We may think it advisable to report to the House that this committee be continued in some way in order to get to the bottom of this matter, and if the fuel controller has obtained this information, it is for the benefit of the country, and why should we not get it?

Mr. HOCKEN: The fuel controller is here in Ottawa?

The CHAIRMAN: Yes. Of course, there is no fuel controller here.

Mr. HOCKEN: He could be here in an hour's time.

Mr. COWAN: That would not be satisfactory to me at all, because there is the additional point that this company has treated this committee with contempt, and when anybody starts out to treat me with contempt, I propose to find out why. I will not be treated with contempt in my official capacity by anybody on earth, whether a grain grower, or a coal company, or anybody else.

The CHAIRMAN: With that spirit, would it not be well to get advice as to what the actual powers of the committee are. Before we go into a fight, I like to know I am on sure ground.

Mr. COWAN: If the reference is not extended enough, we will get it extended some more, if we can.

Mr. DOUGLAS (Cape Breton): There is no question about the reference being wide enough.

The CHAIRMAN: I think there is a very grave question, with all due deference to Mr. Douglas—

Mr. DOUGLAS (Cape Breton): I disagree with that.

Mr. ROSS: I agree with Mr. Douglas, and I think the reference is wide enough, but in reference to the investigation of the coal companies I agree with your opinions, Mr. Chairman, that we should treat all on a parity. The coal people from Alberta have said to us that the supplying of coal by them to Ontario is an impossibility, so the only glimmer of hope we have in Ontario in regard to soft coal is our obtaining our supply from Nova Scotia. That is absolutely essential, and it is also essential to know the sources from which that soft coal is obtainable, and to know the cost of producing it. I agree with what Mr. Keefer has said that we have no right to inquire into profiteering. That is not what we were appointed for, but we cannot know if the coal people of Nova Scotia can supply the people of Ontario at a reasonable price, unless we know the cost.

The CHAIRMAN: There is this idea, too, that this committee is acting for Canada, and while the cost of Alberta coal may not be of great importance to the people of Ontario, it is as great to the people of Alberta as the cost of Nova Scotia coal is to the people of Nova Scotia or of Ontario. In fact, I have a letter in my pocket now, which was handed to me by one of the western members who received it from—I do not know whether one of his constituents or not—but somebody in the West protecting against the procedure of this committee devoting their time to Eastern Canadian matters, as against the western matters—

Mr. CHISHOLM: I think that is a most unfair statement.

The CHAIRMAN: I am not saying whether it is fair or unfair, but that is a view that some of the people of the West are taking of it, and if we are going to act for all parts of Canada, it is just as important for us to see that the people of Alberta are getting their coal at a minimum cost, as the people of Nova Scotia should, and therefore the cost of producing coal in Alberta is of great interest to the people out there.

Mr. ROSS: I have no objection to that, nor of getting those costs, and if we are going to delve into that matter more deeply, we might start with them, as I think it is a very important problem. I think Mr. Douglas' statement in that regard was very accurate and very gratifying.

Mr. KEEFER: Regarding this question of coal for Canada; if you look at that diagram on the map you will see that the province of Ontario imports more coal than is produced in the West, and in the East put together. This question is one of vital importance to the province of Ontario, and of vital importance to the whole community, and we should know where and how we can get our coal, and I think we cannot err, in taking that point of view somewhat into consideration. The fact is, that Ontario imported last year from the United States more coal than is produced in the whole of Canada, and it seems to me that is not a very satisfactory state of affairs.

Mr. COWAN: If the Nova Scotia operators had been one half as frank and candid with this committee as the men from Alberta, we would have been through here with our work long ago. The reason we have had to devote so much time to Nova Scotia is because of the concealment which has been evident all the way through.

The CHAIRMAN: The committee has heard the statement of counsel appearing here for these operators; what do you desire to do in this matter? You could discuss this for a long time, but the important point is to come to some decision.

Mr. KEEFER: I think we ought to notify these witnesses to attend. We have the power to compel them to attend. It may be a question of whether we have the power to compel them to answer, but we can certainly compel them to attend.

Mr. MCKENZIE: I can say to you, Mr. Chairman, that from my own standpoint, I have to be very guarded in expressing an opinion in this committee. I have said from the outset that we were going too far in these things. The press from Nova Scotia, which is represented here, has made a great deal of capital of my stand. I am being abused from Dan to Beersheba all over Nova Scotia, that I am trying to keep evidence from this committee for the benefit of the company as against the miners, which statement is absolutely false and unfair and one that was absolutely false and unfair from the beginning. I said nothing about it. I am a little bit too much of a sport to squeal when newspapers go after me unfairly, but I feel bound to express an opinion on this situation. There are some lawyers on this committee, and I submit to you, sir, that in a court of law, those sheets are not evidence at all; not one particle of evidence have you got, and no judge would look at them for one minute except as they might possibly be called upon by the witness himself in order to refresh his memory, and that refreshing would have to be done by the men who made the figures. The best evidence is the evidence of the presidents, the evidence of the superintendents, the evidence of the managers in charge of the work, the men who are every day dealing with the work in the production of coal. Those are the men we want, not those pay-sheets, which are not evidence at all. There is a gentleman by the name of McEachern, a man very eminent in mining circles, who lives in Glace Bay, who knows every single mine of the Dominion Coal Company, who is acquainted with the most minute details of mining, from the time you start to pick into the face of the coal until it is put on the ship. Gentlemen, if you want evidence, call Mr. McCaffrey, call Mr. A. S. McNeill, produce them here and get the evidence from them, instead

of from those old sheets which may or may not be accurate. After you have heard these gentlemen, if you are not satisfied, if you think they say something that is not right, that they won't tell the truth on these matters, that is a different proposition, but I say to you, and I submit to the gentlemen sitting around here, who are lawyers, that those sheets are not evidence in any court of law in this country, and we are making an awful ado about getting something that is not evidence. We must first get the best evidence, and the best evidence are the men who are actually handling this coal and who are producing it. We have heard very expert gentlemen on the production of coal. We have had the president of the United Mine Workers, Mr. Baxter, a man familiar with all these operations, and Mr. MacLachlan, and Mr. Delaney. We had these men and they gave satisfactory evidence, and if there are any other men you want, for goodness sake get them here, and put live witnesses on the stand, and get the evidence. We had President McDougall and we had President Wolvin, and we had the sales agent, Mr. Dick, and we should be able to get from those men the evidence we want. These sheets are not evidence and I agree with you, sir, that if we are going to get into the sheets of any one concern, we should go into them all. We were satisfied with the *viva voce* evidence of the gentlemen from the West, but we are evidently not satisfied with the evidence of the same sort from the East, and I assure you, sir, that as far as I have any voice in this committee, I am anxious that everything that is evidence should be brought out, and compelled to be brought out from the witnesses here, but I think the evidence should be the best evidence, and the best evidence are the people who know the most about these matters, and I am making no fuss about getting the best people here, who are in a position to give good evidence after we get them.

Mr. DOUGLAS (Cape Breton): The position taken by Mr. McKenzie is a position that perhaps might have been considered at the time these resolutions were passed. The first resolution was passed almost two weeks ago, and a subsequent resolution passed three or four days later. At that time it was considered that the original documents were evidence, and I failed to hear any one in the committee raise a voice to the effect that they were not, and it is very late at this day to say now that the original documents, of any kind—

The CHAIRMAN: You do not include the chairman in that general statement? You heard the chairman raise his voice against it?

Mr. DOUGLAS (Cape Breton): No, I must say that I did not hear the chairman raise his voice in regard to the documents not being the very best kind of evidence which could be produced, because no one at the committee meeting at that time or since then, until this morning, raised that suggestion. Now, Mr. McKenzie urges the best evidence to be given is the evidence of a man who has charge of the work such as a superintendent, or a mine manager, because they are nearer the point of production. What I contend is that the best person who can give the best evidence of the cost is the person who is charged with the responsibility of accountancy, or the actual compiling of all the details that go into the costs, such as material, and the different classes of work, datal labour, contract labour, and so on, and when these figures are compiled they, of course, go to the accountant's office and the accountant staff of the company take care of just what the actual cost of production is. If Mr. McKenzie's argument is right, that the best evidence we could get in that respect is from the mine manager or the mine superintendent, because they are nearest to the point of production, then Mr. McKenzie should admit that even better evidence would be the evidence given by the actual miners. No one contends that the men who dig the coal, the miners themselves, are in a position to come here and tell what the company's costs are, so I think his argument cannot be maintained, and cannot be considered for those reasons.

Mr. McKENZIE: Just one moment. We had Mr. Dion here the other day, and we were satisfied with the evidence he gave—

Mr. DOUGLAS (Cape Breton): I was just going to finish up by saying in addition to that, the cost as shown by the costs sheets, are the costs of production, material, contract prices, and rates, datal labour, and so on. It is not contended by any person that is the sum total of the cost of coal, and the miners or superintendents—would they know anything about the issuance of bonds, the overhead, the depreciation, and other things that naturally enter into the costs of the operations of the company, and no one contends that the superintendent of a mine or the manager would know what steps were entailed in connection with the sales department, and so I say that the only proper step to get these costs is from the accountancy offices of the various collieries. It is true the head office may have some additional expenses that the collieries office may not have, but if the company wants to take that position, it is only proper that we should have the statement of the overhead expenses that go into the cost of every ton of coal. So I think the committee is adopting absolutely the proper procedure in endeavouring to get the costs in the manner in which they are, namely by summoning the auditors to produce the costs as compiled for themselves and for their own purpose, and if that is not good evidence, I do not know what can be considered as good evidence.

Mr. McKENZIE: I speak as a lawyer, Mr. Chairman, and I say in the presence of lawyers, that any books kept by the company, or by a man are not and is not evidence. The only books that are evidence are the books which are required by statute to be kept. If there is a book kept by an individual, or a concern which their Act of Incorporation requires them to keep, which is named in the statute, whatever is in that book is evidence. I speak as a lawyer, in the presence of lawyers, when I say that no other book is evidence. Why, a man might get a book and manufacture his own evidence, and unless it should contain evidence against him, he can make that evidence up himself, and he can keep his books and can say "I will keep this book, and it will be evidence"—why, that is a magnificent way of doing it. Coming down to dealing with other details. As you said, sir, we should treat all the officers in the same way. We had the president of the Ottawa Gas Company here the other day. He told us what it cost to produce gas, and what it cost to produce coke and other materials that he got out of coal, and everybody here seemed to be perfectly satisfied with Mr. Dion's evidence. We took that to be all right. We had Mr. Ross and Mr. Thompson yesterday, from some concern in Saskatchewan—I agree it does not make the slightest difference—and those two men came here, and outlined their business there, they produce briquettes, and they told us their story about the cost of producing and everybody appeared to be satisfied. Nobody asked them for pay sheets.

Mr. COWAN: We have not got to that yet.

Mr. McKENZIE: Will you just possess your soul in patience for a minute? Nobody asked them for the cost sheets, nobody asked for the cost sheets of the Gas Company or the briquette company, or the gentlemen who represented the western coal mines. If you cannot believe President McDougall and President Wolvin and Mr. Dick and the other men here produced, how can you believe a statement that is prepared under the instructions of these men? The first evidence, and the responsible evidence, and the material evidence, come from persons whom you can punish for lying, and the living individuals whom you can put on the stand, who will take the responsibility of taking their oath and telling the truth. If you are insisting that somebody should tell you these things, and you hear the evidence of Superintendent McNeill and Superintendent McCaffrey and then if we are forced to get the books we must go to the proper place for them. There was no suggestion of the committee's issuing a warrant for a witness; they report to the House, and the House decides by motion and instructs the Speaker to issue the warrant. The Speaker issues his warrant, under the seal of the House, and it goes to the Serjeant-at-Arms. The Serjeant-at-Arms, goes with the proper authority and brings the man before the Bar of the House, and makes him tell his story as to why he did not respond to the committee. He is

dealt with then accordingly. If he agrees to tell his story, and submits to the committee that is the end of it; otherwise, he will be punished. That is the procedure. There is no use trying to bring out a new argument. If any official of the Dominion Coal Company, or the Nova Scotia Steel Company refuses to come here, our course is clear, we would compel him by the warrant of the Speaker to come here, but there is no use of making fools of ourselves by asking you, as chairman of the committee, to issue the warrant. If we want to keep up our dignity, let us keep dignified, by keeping within the rule.

Mr. Ross: I think the procedure is set out accurately by Mr. McKenzie. It is as I find it in Bourinot. In Bourinot, printed in English, it is set out:

"If the witness should refuse to appear on receiving the order of the chairman, his conduct will be reported to the House, and an order immediately made for his attendance at the Bar or before the committee. If he would still refuse to obey he may be ordered to be sent for in custody of the Serjeant-at-Arms and the Speaker be ordered to issue his warrant accordingly, or he may be declared guilty of a breach of privilege and ordered to be taken into the custody of the Serjeant'. Similar proceedings are taken when a witness refuses to answer questions".

Mr. McKENZIE: Is that not what I said?

Mr. Ross: Yes.

The CHAIRMAN: Gentlemen, I think there is no doubt at all as to the procedure. If you wish to proceed along those lines, there is no doubt at all about the method of procedure. The point I would like to keep on is what do you wish to do. We may discuss this thing for hours and hours.

Mr. MAHARG: Mr. Chairman, as I understand the report of the counsel, these people have not refused, if my memory serves me right, and I have got his words right. He said they did not feel "as yet"—I think you will find the words "as yet" in his statement. They have not refused. That is why I asked if there was a responsible officer here to whom we could refer, my suggestion would be that we summon a responsible individual here, whether it is Mr. McDougall, or whoever it may be—understand from Mr. McDougall that Mr. Wolvin is not in the country at the present time, and my suggestion would be to subpoena Mr. McDougall here for to-morrow Monday, in the usual way.

Mr. COWAN: Well, Mr. Chairman, we have already issued summons to them and they assured us that they understood them.

Mr. Ross: No, no summons at all.

Mr. COWAN: It is the same thing.

The CHAIRMAN: No, it is not.

Mr. MAHARG: You asked them for these costs sheets. I was not here when the resolution was passed, and I have no idea what it was, but let us get some responsible official here, and get some specific statement as to what they will or will not do, then we will know where we are, and we will not be going before the House in a somewhat awkward or absurd position later on.

The CHAIRMAN: I think I stated at a previous meeting of the committee—perhaps you will permit me to repeat it—that I have made some little investigation as to the production of these costs sheets, and what it means to the committee. I think I made the statement at a previous meeting that even if these costs sheets were laid before the committee, the committee would be absolutely helpless to get from them the information which they desire. I think if you will look—I am not positive about the proceedings adopted by the Fuel Controller of Canada, but I think he followed a similar proceeding to that followed by the Federal Trade Commission of the United States.

appointed to investigate the whole coal question, and the report of that commission was very recently made. The first thing they had to do in getting at the cost was to standardize the method of securing costs. They found different coal companies had different methods of keeping their costs, so that when they got the costs from the individual companies, they had not the information they desired, because some companies were including certain items in the costs which other companies did not, and their desire was to have a uniform method of securing the costs.

As I understand it, they then adopted a system or rather a form of report, which was submitted to all the coal operating companies, and had the costs of the individual companies presented on these reports. In that way, they got uniform costs from all the companies. As I say, I am not positive that I am right, but I think I am when I say that the Fuel Controller of Canada adopted a similar method. It is quite all right for us to ask for these costs sheets from the two independent companies, but when we get them, I do not think we will be in a position to get much information from them, if they are laid before us, and if they were, we might go over them, and get a very erroneous conclusion, and in order to get accurate information on these costs, I think it would be necessary for this committee to get a staff of accountants who are familiar with that work. In order to relieve you of any suspicion, I might say that I did not get any of this information from any person connected with any of the coal companies.

MR. COWAN: Mr. Chairman, your statement does not appeal to me at all. There is no doubt in my mind but what a great big corporation like either of these, knows exactly from month to month just exactly what it costs them to produce the coal. If they do not know, they are conducting their business in a very loose and slipshod manner. I have no such idea regarding either of these companies. I believe that they could come here if they wanted to and without any books at all could tell us what it cost them; but they do not want to do it, and we have been forced into the position we are now in.

MR. MCKENZIE: Would it be a credit to the committee if you should consult the Parliamentary Counsel himself. There seems to be a hitch as to what we are going to do here, and I think it would be well to have the opinion of some independent officer.

MR. KEEFER: I think before we consult the counsel, we had better clear up two certain facts. If we call a witness before us, and we cannot report to the House until we do,—the rule is perfectly clear on that.

MR. DOUGLAS (Cape Breton): Excuse me, Mr. Keefer; I did not quite catch what you said?

MR. KEEFER: The procedure, as stated by Mr. McKenzie and as read by Mr. Ross from Bourinot, is that if a witness refuses to appear on the order of the chairman, his conduct shall be reported and that is as far as we can go. I do not suppose any complaints were taken on the evidence. I think it is pretty good evidence, but the point is this, what we are after is not the cost sheets, or the papers, but after the information.

MR. COWAN: Hear, hear.

MR. KEEFER: What is the cost of this coal? What is a reasonable profit? Those are the things we want to get at.

THE CHAIRMAN: That is not according to the resolution passed by the committee.

MR. KEEFER: The resolution passed by the committee to the effect that the auditors of all the coal companies appearing before this committee do personally attend with the original cost sheets mentioned in the resolution, of April 21, 1921, for the purposes of examination thereon. We want the examination of these auditors, if I understand the position. Now, are we in a position to report that when they have not attended? That is the whole question. We cannot go any further. We can talk until we are black in the face, but we have got to make a report.

Mr. COWAN: What have we to do to constitute the legality of a summons to these men to appear in order to compel their attendance? Have we done it? If not, what have we to do?

Mr. ROSS: We had no reason to resort to that until this present moment, because these people said they were willing to do it.

Mr. KEEFER: If they are not in attendance, before we can report, we have to show they have been summoned. That is what Bourinot says, "received the order of the Chairman." That is the situation to-day as to the company, was the company furnished with that order? Their policy is not to furnish us with this information and I personally think it is a very unwise policy in so far as it gives the public a great deal of misunderstanding and misapprehension. I think it would be in the own interest to remove any question of profiteering which the public may have about it.

Mr. ROSS: I think Mr. McKenzie's suggestion is very, very good. I think before we go ahead with this thing we should know that we are acting within our authority. And I would suggest to the chairman, that he and Mr. Douglas be appointed a committee to consult with Mr. Gisborne to see what our authority is in this regard.

The CHAIRMAN: I think what you want from Mr. Gisborne is a regular statement which can be presented to the committee.

Mr. KEEFER: We will want the facts.

Mr. ROSS: Well, Dr. Steele and Mr. Douglas will lay the facts before him. They know what the facts are.

The CHAIRMAN: We will produce our reference and the resolutions.

Mr. DOUGLAS (Cape Breton): And the notifications which have been sent.

Mr. MCKENZIE: What is the motion.

Mr. ROSS: You heard me make it.

Mr. MCKENZIE: It is understood, sir, that yourself and Mr. Douglas be delegated to lay the matter before the parliamentary counsel—

Mr. ROSS: And report back to the committee to-morrow morning.

Mr. MCKENZIE: If we meet to-morrow morning.

The CHAIRMAN: The committee will meet to-morrow morning. We have a witness to appear to-morrow.

Mr. MCKENZIE: The Parliamentary Counsel may not be able to give you an opinion to-morrow. Make that motion read to report back as soon as you get the information.

The CHAIRMAN: Do you make that as a formal motion, Mr. Ross?

Mr. ROSS: I do.

The CHAIRMAN: It has been moved by Mr. Ross, seconded by Mr. McKenzie that the chairman and Mr. Douglas appear before the Parliamentary Counsel and present to him—

Mr. ROSS: And get the opinion of the Parliamentary Counsel as to our authority and the proper course to pursue in order to get the evidence which we are desirous of obtaining, as covered by the resolution.

The CHAIRMAN: You are assuming that you have the power to get it. I think it should be left open.

Mr. ROSS: I do not care how you put it. The committee has the idea of it.

The CHAIRMAN: We had better have it put in correctly.

Moved by Mr. Ross, seconded by Mr. McKenzie, that the chairman and Mr. Douglas be appointed a committee to consult with the Parliamentary Counsel and submit to him the submissions of the House, and the resolutions passed by the committee.

mittee, in regard to the attendance of witnesses connected with the coal companies, and the production of the costs sheets, and to get his opinion as to the powers of the committee to secure this evidence, and as the proper procedure to pursue, so to do if they have that power and to report back to the committee as soon as possible.

Gentlemen, what is your pleasure?

Carried.

The CHAIRMAN: Does that conclude this matter for the present?

The CHAIRMAN: If we have finished up with this other matter, we have Mr. Scott, of Quebec, present this morning. He desires to make a statement to the committee. I explained at the opening of the sitting this morning how Mr. Scott came to be here.

Mr. MCKENZIE: Upon what subject is he to speak?

The CHAIRMAN: Mr. Scott is interested in the Skeena River District of British Columbia.

JAMES GUTHRIE SCOTT, called, sworn and examined.

By the Chairman:

Q. Mr. Scott, what position do you hold in connection with the coal industry?—A. I am chairman of the company which has been formed for the development of coal in Northern British Columbia, in the Upper Skeena river, in Col. Peck's constituency.

Q. Have you had any connection with the coal industry prior to that?—A. Well, I was connected with some coal developments in the Yellowhead Pass in Alberta.

Q. Your home is in Quebec?—A. My home is in Quebec, yes.

Q. What is your position there?—A. I am a retired railway manager.

Q. And you are familiar more or less with the western country?—A. Rather.

The CHAIRMAN: Now, Mr. Scott will make a brief statement to the committee.

WITNESS: Mr. Chairman and gentlemen, I know your time is very valuable, so I will not detain you over ten minutes, and if you will permit me I will read my statement.

I would draw the attention of the committee to a coal field in British Columbia, which would seem to be of very great national importance, as offering an abundant supply of hard, smokeless naval fuel, similar in character to the Welsh coal used by the British Navy.

This coal field covers an area of about 47 square miles and is situated on the headwaters of the Upper Skeena river, in latitude 56° 45', about 150 miles north of Hazelton on the Grand Trunk Pacific railway.

The quality of the coal according to the British definition is anthracite, according to that of the United States it is semi-anthracite. The analysis gives from 74 to 86 per cent of fixed carbon. It breaks in bright hard lumps, and will stand transportation over long distances, and in this respect is unlike the lignite and some of the bituminous coals of Western Canada, which are friable and go to dust. Samples taken out eight years ago are as bright and intact as when mined.

The quantity of coal in this great field has not been computed, but some idea may be formed from the reports of two experienced mining engineers who examined 47 square miles of the territory owned by Quebec and London capitalists. These engineers estimated that on the 30,000 acres in question (47 miles) there are 1,100 million tons.

Four very well-known mining engineers and geologists have examined these holdings at various times, and all unite in saying that the coal is of the very best quality, and similar to that of Pennsylvania.

[Mr. James G. Scott]

The difficulties to be overcome in order to make this coal field a centre of great industrial activity are, firstly, the means of transportation and, secondly, a market.

There are three routes by which a railway may reach the field—first, a branch northward from Hazelton on the Grand Trunk Pacific railway, which would follow the valley of the Skeena river, a distance of about 150 miles; secondly, an independent railway for which the Legislature of British Columbia has given a charter, the Naas and Skeena River railway, from the mouth of the Naas river, on the Pacific coast, a little north of Prince Rupert, to the coal field, a distance of one hundred and eighty miles, to the first hundred miles of which the Dominion Parliament voted a subsidy of six hundred and forty thousand dollars in 1912; third, an alternative line could be built from the Alice Arm to Stewart, on the Portland Inlet, a distance that way of a little over one hundred miles. These are the three routes by which this coal would be moved.

Next, as to the market. That is a question which has given rise to some queries, and our engineer assures us that there is a large market on the Pacific coast. It is contended that the quality of coal now used on the Pacific coast is very smoky and rather dirty, like Australian coal, and is not desirable for passenger steamers or for naval fuel. The United States Government have been very much interested in this question on account of their fleet on the Pacific coast, and they have been looking into it—into the question of our coal fields. Last year Secretary of the Navy Daniels went to Alaska and reported from a place called Anchorage, in Alaska, that there was a large supply of good coal there which could serve the purpose of the United States navy. We have information from the most reliable sources that that Alaskan coal is suitable for that purpose, and that eventually the United States navy will have to seek its smokeless fuel from this deposit, which is the one, and only one of that character on that coast. Apart from that, our engineer, Mr. Campbell Johnson, and his assistant, Mr. Monkton, contend there is a large market all along the Pacific coast, down as far as the Panama canal for a good quality of household coal, and this coal may come east a certain distance—I cannot say how far—and take the place of the domestic coal for use by people who in ordinary cases would use anthracite coal from Pennsylvania, if it were available. That is perhaps a more or less limited market. In addition to that there is the question of bunkering commercial ships on the Pacific coast. I understand the Government contemplate building a bunkering station at Prince Rupert. If I understand it correctly, Prince Rupert is 500 miles closer to Japan than Vancouver, and therefore would seem to be a very suitable place for that purpose. If a railway connection should be made at either of the points in the Portland canal, or even at the mouth of the Naas river, the coal could be brought to Prince Rupert on floats, that is to say, on car ferries or train ferries, so it would be equally available as if it were through Hazelton and the Grand Trunk Pacific.

Some years ago, at the beginning of the war, we had a communication from Lord Rhonda on that question. Now, Lord Rhonda as you know, gentlemen, was the greatest coal miner, or one of the greatest coal miners in the world. He was a man who was said to have produced nine million tons of coal from his own holdings, and he is the man who furnished the British Navy with their coal supply. Now Lord Rhonda was so interested in this matter, that he took a certain interest with us and he offered the Dominion Government to develop this coal area, provided they would renew the subsidy of six hundred and forty thousand dollars, to which I have alluded, and which had then run out for lapse of time. Shortly after that, Lord Rhonda, who was made the fuel controller during the war for the British Government, unfortunately died, so that that question was dropped. We have been in communication with the British Admiralty through the Agent General of British Columbia, through Sir Robert Borden, and the Prime Minister, Mr. Lloyd George. Those negotiations have not terminated in any way as yet, but they show that the British Government is taking a very keen interest in the development of this great coal field.

[Mr. James G. Scott.]

I think I have nothing more to say, gentlemen, except that I think this is a natural product which is well worthy the attention of Parliament, and if it could be realized—and I am sure it will be realized eventually—I believe it will cause the reproduction in Northern British Columbia of all the industries which are caused, or have resulted, from similar classes of coal in Pennsylvania—

By Mr. Peck:

Q. That is generally known as the Ground Hog coal field?—A. Yes.

The CHAIRMAN: Mr. Peck, will you show this committee on the map the location of it, so that we will have it in our mind's eye?

Mr. KEEFER: Mr. Scott, could you furnish the committee with some report of the mine from reliable engineers, and leave them with us?

By Mr. Peck:

Q. Could you not send in the report of Mr. Campbell Johnson?—a copy to each member of the committee?—A. Yes, I have a pamphlet here which I will leave for the information of the committee. It shows some of the different seams of coal and figures showing the work each has done.

By the Chairman:

Q. You spoke of this reference to the Pennsylvania coal, Mr. Scott. Will you tell the committee how it compares—your coal—with the Pennsylvania coal?

By Mr. Cowan:

Q. On that same subject, you might also explain the difference, if you can, between the English standard of anthracite and the American standard of anthracite. I was not aware that there was any difference.—A. There is a different standard, as I understand it. I am not enough of a technical man to say just what the difference is, but there is some difference between the American standard of anthracite coal and the Welsh, and according to the engineers—according to the British definition anthracite, the coal we have is considered anthracite, but according to the American definition, it is semi-anthracite.

I will read to you what Mr. Grossmann says as to comparisons with Pennsylvania coal. Mr. Gustav Grossmann, who is a Pennsylvania engineer, made a report on this coal which is quite a short one, and I will take the liberty of reading a few words.

“During my visit to the Ground Hog Mountain coal field (from May until October, 1912) for the purpose of investigating its economic value as far as an exhaustive superficial examination and inspection of its various exploration workings could disclose, I also examined, among others, the holdings of your syndicate.

“Without going into details as to geology, transportation facilities, and so forth, a general synopsis of the merits of your property may be given as follows:—

“Forty-seven sections, thirty thousand and eighty acres, situated 56° 45' north latitude and 128° 15' west longitude, in the western part of the Ground Hog Mountain coal field, a considerable portion of which is favourably located as containing coal seams of superior quality and of workable dimensions.

“Number of workable seams uncovered: 6, with an aggregate thickness of 28 feet.

“Quality of the coal: Anthracite. Very bright and hard and of excellent steaming quality, comparing favourably with the Pennsylvania product.”

[Mr. James G. Scott]

By the Chairman:

Q. Is it as hard as the anthracite of Pennsylvania?—A. It is so hard that I have had samples in my office for eight years, and they are bright to-day and as hard and free from dust and friability as we could get them.

By Mr. Douglas (Cape Breton):

Q. Whose report is that from which you are reading?—A. I am reading from the report of Mr. Gustav Grossmann, a Pennsylvania engineer who examined this field. Just a word more.

“As the coal breaks in large lumps it will stand transportation over long distances.”

The great objection to many coals is, as you know, the breaking up or disintegration of coal, especially lignite (which is very liable to go into dust) when transported over long distances. Mr. Grossmann goes on to say:

“Sufficient development work has not been done to produce definite evidence as to what may be calculated as the workable coal resources of the whole property, but in my judgment they should be very large; inasmuch as the property is not thoroughly explored, new discoveries of commercial coal seams are likely to be made. In any event, it is evident that there is more than sufficient coal here to warrant the building of a railway for its development. No extraordinary or unusual engineering difficulties will be encountered in the opening up of this property, which should be capable of producing a large daily tonnage of a superior quality fuel, and I would consider the development of this group of coal claims an inviting business proposition which should be attractive to investors.

“There is no coal mined in the Dominion of Canada which is of the same or similar quality as this either in physical or chemical properties, and so far no such coal has been discovered in commercial quantities in the Dominion. Practically speaking, there is no anthracite west of Pennsylvania in the United States. Judging by the amount of Pennsylvania anthracite that is used in the United States and Canada, it may readily be seen what a gap in the coal supply in the West will be filled by the opening of this field.

“The smokeless character of this coal should open for it a large market in the coast cities where the smoke nuisance is prohibited. Its cleanliness for household use and its steady burning properties, should bring it into general use for domestic purposes. For steam purposes, with proper grates, this coal, although lower in British thermal units than a bituminous coal, will give a greater amount of effective heat. This is due to the fact that the great waste of unconsumed hydrocarbons in the case of bituminous coal is avoided, or at least reduced to a minimum, with anthracite.

“As illustrating the comparative importance of such an area as this, it may be stated that this area alone probably contains as much coal—possibly ten times as much—as is found in all the present known coal areas in the province of Nova Scotia.”

Mr. PECK: Hear, hear.

Mr. McKENZIE: I am afraid that damns that report very badly. This is a hint to you that I am from Nova Scotia.

WITNESS: Mr. McEvoy, who is a member of the Geological Survey in the employ of the Dominion Government and a renowned mining engineer, says:

“This coal has a crystalline fracture, is very bright and hard without any pronounced jointage planes. It is not at all crushed or slickensided, and as a consequence it would be mined in strong hard lumps, and will make little slack

[Mr. James G. Scott]

It burns very well in a blacksmith's forge, giving an intense heat, so great is the heat, in fact, that if a steel implement is left a few minutes too long in the fire, the steel would be melted. The flame is almost colourless and smokeless.

As to whether the coal should be called an anthracite or a semi-anthracite, there will be some doubt, as there is no universal standard of composition and physical properties as yet adopted. Under the most rigid classification of Pennsylvania, it would be a semi-anthracite, but under the British classification, on the other hand, it would be called anthracite."

By Mr. Cowan:

Q. Where do the Canadian Merchant Marine vessels on the Pacific bunker now?

Mr. PECK: Ladysmith.

Mr. COWAN: Where do they get the coal from.

Mr. PECK: Vancouver Island.

Mr. COWAN: Where do the American vessels bunker?

Mr. PECK: Vancouver^s Island.

Mr. COWAN: They all come up there?

WITNESS: I think there are some at Puget Sound, but it is dirty, I am told.

By Mr. Cowan:

Q. This looks to me like a good industry.—A. It looks as if we might get control of the Pacific market.

Mr. COWAN: The situation is that commerce is on the threshold of development on the Pacific coast, and it would be a pretty good thing if Canada could concentrate her efforts and attention upon the bunkering there.

WITNESS: Yes, I think so. Of course, there is the question of the Panama Canal. It might be that coal would come farther south and farther east than we are looking for to-day by reason of having cheaper navigation.

By Mr. Cowan:

Q. What is the quality of coal on Puget Sound on the American side?—A. It is bituminous coal.

Q. Is it better than the coal we have in Canada?—A. I think it is. I understand the bituminous coal we have in Canada is not nearly as good as this coal in that field.

By Mr. Keefer:

Q. Speaking of that coal going through the Panama Canal, to the West Indies, —where they have no coal—as a railroad operator could you give us an idea of what the cost would be per ton for water freight?—A. I was given an estimate by our engineers before the war, but things have changed so much that I could not answer that now.

Q. They are coming back very rapidly, as far as water transportation is concerned. Do you know what the estimate was for transporting that coal by water?—A. No, we have not had any estimate.

The CHAIRMAN: Are there any further questions?

By Mr. Cowan:

Q. Are there any iron mines in that locality? Any known iron mines?—A. I think Col. Peck could answer that better than I can.

Col. PECK: None working, there are some in prospect, but none that have been developed.

Mr. MCKENZIE: Just a moment, Mr. Chairman.

[Mr. James G. Scott.]

By Mr. McKenzie:

Q. Is this coal of which you are speaking located in the province of British Columbia?—A. Yes.

Q. And did you have a report from your mining department in British Columbia—do you know if they have made a report on it?—A. Yes. Mr. — I have forgotten his name—one of the geologists of the Department of Mines made a report there, but he died a couple of years ago, I have forgotten his name.

Q. Have you got his report?—A. I have not it with me, but you can get that from the Department of the Interior.

Q. Do you remember in a general way what he said about it?—A. He said, in a general way that this was a large coalfield, and the Dominion Government have not thoroughly examined it. We have been constantly urging that they should, but there has always been a lack of appropriation to do the work; they have other work to do elsewhere.

Q. You mean the Government of British Columbia?—A. No, the Dominion Government.

Q. But the minerals in British Columbia, like Nova Scotia belong to the province?—A. Yes.

Q. Have they made any investigation there, the local government?—A. To a limited extent I think they have. They sent their engineer Mr. Fleet Robertson, but he made a very hurried trip, so hurried that he was only one day in riding through a coalfield, fifty or sixty miles long.

Q. How many square miles did you say were there?—A. About 1,200 square miles.

Q. Is it leased?—A. A great part of it was leased, but a great many of the leases have fallen down owing to the absence of any probability of transportation.

Q. Does your company own some coal?—A. Our coal is still holding. We paid our dues and retained our holdings.

Q. Just one more thing I want to ask you, Mr. Scott. What about the formation of this coal? How high is the seam? What is the face of the seam? That is, as far as you have gone in.—A. There are eight seams, and they are all more or less slanting, so we have not been able to trace the seams in that way.

Q. Do they stand on end?—A. Not quite, but they stand at an angle.

Q. What you call pitching seams?—A. That, I am not sure of.

Mr. PECK: They use different phrases in British Columbia than they do in Cape Breton.

Mr. McKENZIE: That is what they say in British Columbia?

Mr. PECK: I think so.

Mr. McKENZIE: I think that is a general term, when it is on edge, but when it gets to a perpendicular, it is regarded then as very hard to work.

WITNESS: There are two photographs in this book. That (referring to page 9 of the pamphlet) is the Benoit seam, and that (referring to same page,) is the first upper seam on Beirnes' creek.

Q. Were those photographs taken above the ground.—A. Yes.

The CHAIRMAN: Any further questions to ask Mr. Scott.

By Mr. Cowan:

Q. Does a provincial license for a lease carry with it the provision that you have to develop a certain amount each year, or your lease falls down?—A. We have to do a certain amount of work, but we have had the time extended as far as our leases are concerned. You see it is impossible to pretend to do the work in a country which is one hundred and fifty miles from the railway, and no roads to get to it. We had to send in all of our supplies by pack horses.

[Mr. James G. Scott.]

Q. It would be impossible to try to transport coal one hundred and fifty miles that way?—A. Yes, and trying to work up there is a very hard task.

By Mr. Peck:

Q. Have you been able to get a sufficient amount of coal out in order to try it as steam coal?—A. No, all we were able to bring out on these pack horses were samples. Mr. McEvoy has burned those samples, and I have read to you what he said about them.

By Mr. McKenzie:

Q. How far are you from the nearest navigable water?—A. Stewart, on the Portland canal, is the nearest. That is about 100 miles distant.

Q. Your difficulty would be to compete in the markets with the usual outlets, on account of the large outlay you must make before you could even get coal?—A. That has been the difficulty so far—to get a railway built to get it out.

By Mr. Cowan:

Q. So the real difficulty is one of railways?—A. Is there any real difficulty?

Q. Is that not your real difficulty?—A. Yes, that is the only difficulty.

By Mr. Douglas (Cape Breton):

Q. What other resources have you there, Mr. Scott?—A. The Naas valley, through which our railway is projected, is a fine country and has good timber. That extends probably hundreds of miles.

By Mr. Cowan:

Q. After the timber is taken out, is the country capable of producing agriculturally?—A. Yes. You can see some pictures there (referring to pamphlet) showing the Naas valley to which I referred.

THE CHAIRMAN: Does the committee wish to continue the examination any further?

MR. COWAN: That is very satisfactory information.

THE CHAIRMAN: Yes, I agree that Mr. Scott's evidence has been very interesting.

WITNESS: Thank you, gentlemen, for your kind attention.

THE CHAIRMAN: Before we adjourn let me say that to-morrow we will have Mr. McDougall, of the Inverness district, before the committee. We have no other witness for to-morrow morning as far as I know. Now, gentlemen, the only question before the committee in the way of evidence is this witness to-morrow and the matter of the costs from the coal operating companies. We all are in hopes that the House will close within the next two weeks—Mr. McKenzie may not agree with me—but I think we are all hoping for that and in that case it seems to me that it is very necessary for this committee to at once get busy on the report and get it before the House within the next few days if we are going to have any consideration of it. What does the committee wish to do concerning the preparation of this report? I had in mind before to-day's session that possibly after hearing this witness to-morrow the committee could spend half-an-hour or so in outlining the report, that is, to determine the principles of the report, and I thought perhaps we could have a tentative report prepared for submission to the committee. I do not know what the committee is prepared to do.

The committee adjourned until Saturday morning, May 14, 1921, at 10.30 a.m.

HOUSE OF COMMONS,

COMMITTEE ROOM 425

SATURDAY, May 14, 1921.

The Special Committee appointed to enquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

The CHAIRMAN: Will the Committee come to order? We are to hear to-day Mr. McDougall, of Inverness.

I. D. McDUGALL called sworn and examined.

By the Chairman:

Q. What is your occupation?—A. I represent the miners of Inverness on the cost sheets in the company down there.

Q. What do you mean by the miners in Inverness?—A. The miners' union.

Q. How long have you held that position?—A. Since the 1st of March.

Q. Would you just detail to the Committee briefly your exact work in that position?—A. We have to look after the cost sheets. I just supervise the cost sheets to see what their production costs are in order that the men may know what is going on there, and have a basis to work on. Whenever they negotiate with the company for wage agreements.

Q. That is the company's cost sheets, you mean?—A. Yes.

Q. You have access to these?—A. Yes, sir.

Q. Then you prepare from them cost sheets for the use of the men?—A. Exactly.

Q. Have you a statement prepared?—A. I have a statement here that may give a basis for any questions that may be asked.

By Mr. Maharg:

Q. Before we proceed, what are your qualifications for making a close enquiry into a matter of that kind?—A. A considerable amount of schooling, and some business experience besides.

Q. You understand thoroughly the system of accounting and checking. It is just for information and to be clear on the point that I am asking.

Mr. CHISHOLM: Mr. McDougall is a lawyer.

By the Chairman:

Q. You might be a little more definite. What education have you had?—A. I have a university degree in arts at St. Francis Xavier, Antigonish.

Q. What business experience?—A. A three months' business course under a chartered accountant, and I have worked on books myself for a year and a half or two years.

Q. You may proceed with your statement.—A. Gentlemen, I appear before this Committee primarily as the appointed delegate of the miners' union of Inverness, in the county of Inverness, Nova Scotia. We have many coal areas in Inverness county, but the Inverness colliery is, so far the most important; because it has been better developed and has been worked for the last 20 years. Since it was first equipped for operation, its normal daily production for several years was not less than 1,000 tons. Often the output reached 1,300 or 1,400 tons a day. This colliery has a distinct local importance in other respects. It is located in the very centre of a large county, which in the province of Nova Scotia is one of the leading counties agriculturally. This

coal mine at Inverness has created for our people the only home market they have or ever had. Consequently, when difficulties or danger of closing beset our mines, it is a matter of vital concern to all our people. The Inverness mine share what would seem to have been the deplorable and common fate of all Nova Scotia collieries during the past five or six months. That period has been very trying and difficult for both operators and employees. A company called the Inverness Railway and Collieries, Limited, of which Mr. C. Henderson was President, took over the Inverness mine last July. Mr. Henderson succeeded in making some very good contracts overseas; but he had shipped little or no coal on those contracts when the embargo was put on. Consequently, this business was lost to the Inverness colliery. I notice that Mr. Dick declared before this Commission that the embargo did not adversely affect the Dominion Coal Company. Mr. Dick may be right in reference to the Dominion Coal Company, but of this I am certain, the embargo dealt a staggering blow to the Inverness coal industry. On or about February 8, 1921, the Henderson Company went into bankruptcy. The Eastern Trust Company of Halifax are now acting as receivers for the bond holders. Following the insolvency of the Henderson Company, the Inverness mine was closed for about three weeks. Before the resumption of work at Inverness under the direction of the Trust Company referred to, only a little more than one-half of the former employees were re-hired. A few more were taken on at intervals since until now there are about 460 working in and about the mines at Inverness. Before the mine closed down, there were about 650 employed. You can therefore understand that we have considerable unemployment at Inverness. Again the mine at present works only four days a week, and a large amount of the contract mines work alternate weeks, so that what work there is, is very irregular. The reason why we have unemployment and irregular work at Inverness is attributable wholly to an inability to find a sufficient market for the coal that can be produced. On the 1st March I was appointed by the labour union at Inverness as their representative to supervise costs and watch production generally. In my treatment of the Inverness mine, I shall therefore deal more particularly with its operation for the months of March and April. During the month of March the average number of men employed was approximately 390. Excluding the four Sundays, there were eight idle days. The total tonnage for the month was 10,140 tons, or an average daily output for the 19 days worked of approximately 534 tons. The company's costs as shown by their cost sheets was \$5.45 per ton loaded in cars at the mine.

By Mr. Douglas:

Q. Long or short ton?—A. Long ton. This cost includes the expenses of idle days and Sundays. The aggregate cost of idle days in March, including coal consumed by the mine boilers would amount to a charge of 50 cents against the actual tonnage for the month. In other words, had the Inverness mine worked regularly during the month of March, the output would have been increased by 4,264 tons, and the cost would have been \$4.95 instead of \$5.45 as shown by the Company's cost sheets. During the month of April there were approximately 420 men employed at the Inverness mine, excluding Sundays all had nine idle days. The actual tonnage for the 17 days worked was 11,250 tons, or an average daily output of 700 tons. The company's cost sheets for the month of April are not yet completed, but a very fair estimate, including idle days, would be \$5.25 loaded in cars at the mine. The aggregate cost of the nine idle days in April, including labour and colliery coal was approximately \$6,000, which represents a charge of almost 54 cents against the total tonnage for April. Had the Inverness mine worked regularly during the month of April, the output would have been increased by 6,300 tons, and the cost per ton at the mine would be represented by \$4.48 instead of by \$5.25 as shown by the company's cost sheets.

Now in regard to the coal areas in the country, I may say that all our tested deposits in Inverness are situated on the coast and are named as follows: Port Hood, Mabou, Inverness, St. Rose and Chimney Corner. The quantity of coal in the tested

[Mr. I. D. McDougall.]

area is estimated very conservatively at 120,000,000 tons. This is only in the tested areas, but in the total areas, some estimate that there are a billion tons, and others estimate that there are between 500,000,000 and a billion tons. All these valuable mines, except Port Hood and Inverness are not working, and they are not working particularly because of lack of transportation facilities. There are no shipping harbours on our long rugged coast.

By Mr. Douglas:

Q. Between Cheticamp and Hastings?—A. Yes. A railway 60 miles long owned and operated by an insolvent company, was built by that company from the Strait of Canso to that company's own coal mine at Inverness. That is the only regular means of transportation we have, and it is far from satisfactory or sufficient. Each of the coal mines named is owned by a private corporation or individual. They are, therefore, all rivals, and a railroad owned by one cannot be of equal advantage to all. I might give you an illustration of that. In regard to the freight rates of the Inverness mine charged the Port Hood people for hauling their coal, we charge \$1 there for hauling the Inverness coal from Inverness to Point Tupper.

By Mr. Maharg:

Q. How far?—A. A little over 60 miles. It is about 40 miles from Port Hood to Point Tupper. The company charge this up at \$1 a ton. They charge the Port Hood people \$1.04. They charge \$1 for hauling it a little over 60 miles. A railroad owned by one company cannot be of immediate advantage to all. Perhaps the most immediate and essential aid that the State could give to our coal mines in Inverness would be to acquire at once the Inverness railway and extend it further north 40 miles to the Harbour of Cheticamp. That would stir up immediately the mines of St. Rose and Chimney Corner. The coal of these northern mines would be shipped every day in summer from Cheticamp up the St. Lawrence to the Montreal markets; and all the other collieries of Inverness would have an equal chance on a Government railway to the Strait of Canso. Not only all the miners but also all the people of Inverness would be served appreciably if this important Commission, would, in the public interest, recommend to the Government the taking over without delay of the Inverness railway and its extension from Inverness to Cheticamp.

WITNESS: The miners of Inverness are particularly anxious that this should be done, and in order to show you gentlemen how that railway, if extended, would serve the county of Inverness, in the matter of exploiting the coal areas, you may have a glance at that map which shows the exact position of the coal areas in that county.

The CHAIRMAN: Have you concluded your statement?—A. Yes.

The CHAIRMAN: The witness is now here to answer any questions which any member of this Committee may want to put to him.

Mr. COWAN: This is rather a new situation. I would like to ask the witness a question.

By Mr. Cowan:

Q. Is the company which you have been dealing with required to keep these costs sheets private? Do they allow the public to have access to them?—A. They allow me access to them, but they never said anything about keeping them private, and as I represent the men, I think the costs sheets should be obtained. That is the feeling among the miners of Nova Scotia. I may say that they are not very well satisfied that the costs sheets of the Nova Scotia and the Dominion Coal have not been brought here. They think they should be here.

Q. Have they taken any objection to the public knowing what the cost of coal at this mine is?—A. Not if it facilitates the selling of coal. They are anxious to sell their coal. They are going in the hole about ten thousand dollars a month—

[Mr. I. D. McDougall.]

during March and April—on account of idle days and on account of the inability to sell their coal. Now, if the revealing of the cost of production will facilitate the matter of getting orders, they have no objection to doing it.

Q. That is a new one altogether. That is different from what we have got from the Nova Scotia. You said the cost of getting the coal was somewhere around five dollars a ton?—A. Yes.

Q. Is that a submarine mine?—A. Yes, a submarine.

Q. And in that way it will be almost as difficult mining as in Cape Breton?—A. Fully as difficult.

By the Chairman:

Q. You are familiar with the conditions in Cape Breton?—A. Yes.

Q. As a practical miner—A. No.

Q. What knowledge have you of the conditions of the two districts, so that you can give an authoritative answer to that question?—A. I have no practical knowledge of either of them; I have never been down.

By Mr. Douglas (Cape Breton):

Q. You have been around the mines and in the field of Cape Breton and Inverness?—A. Yes.

By Mr. Cowan:

Q. If a small company such as this, under these very difficult conditions can produce coal at five dollars a ton on board cars, should not the larger company produce it cheaper than that?—A. There is one thing you must take into consideration in connection with the Inverness matter, and that is that very little development work being done there at the present time. They are getting coal at the places where it is the cheapest, but when they commence their development work again, probably the cost will be enhanced to a certain extent, but in my mind, yes, the larger mines should produce cheaper than at Inverness.

By Mr. Douglas (Cape Breton):

Q. You take up a great quantity of water in Inverness county?—A. Yes.

Q. What does that cost?—A. It used to cost one dollar a ton. I think it is down to fifty cents now.

Q. In your statement of what the coal costs—I believe you have some details?—A. Yes, for the month of March that cost of five dollars and forty-five cents was made up of labour three dollars and twenty-two cents, materials, including boiler coal, one dollar and thirty-five cents, royalties, eleven cents, insurance three cents, taxes six cents, general charges four cents, workmen's compensation ten cents, leases two cents depreciation and depletion twenty-five cents, coal to workmen twenty cents, wastage picking at belts, seven cents; total five dollars and forty-five cents.

Q. All of the costs which you have given are of course, based on a long ton? The statement that you have made up to date—in that you have always been talking about the long ton or two thousand two hundred and forty pounds?—A. No, the cost based on the short ton.

By Mr. Chisholm:

Q. Mr. McDougall, talking about the coal deposits down there, you regard that as the only virgin coal region in Nova Scotia?—A. I beg your pardon?

Q. You regard that one as the only virgin coal region in Nova Scotia practically—that has not been touched?—A. North of Inverness.

Q. And as far as the other mines are concerned they are only in an initial stage?—A. Exactly.

[Mr. I. D. McDougall.]

Q. Mr. McLachlan mentioned new deposits discovered—A. At Port Bann.

Q. Taking the whole question of coal supply into consideration, if that road were extended down there, and those mines opened up, is it not your opinion as a business man that the deposit of Western Cape Breton coal could be put on the markets of the world, or we will say of Ontario—of course, that is the world—cheaper than it could be done from any other deposit of coal?—A. It would be my opinion, yes, but shipping from Cheticamp up the St. Lawrence, they get mighty cheap coal at Montreal.

Mr. CHISHOLM: I must emphasize this, as Inverness county is in a particularly difficult position now. It is difficult for them to produce cheap coal even now, as they are having a great deal of difficulty by way of not having a market, and on that point, I now say with regard to the embargo that it is a crime—I emphasized that when Mr. Dick was here—it is a crime, as it just simply slaughtered the possibilities of Inverness coal mines. As my friend, the Chairman, has said, they are looking for a high grade cheap coal in Ontario, and when he is making his report, I would like it if he would bring within his vision that particular zone where there is an abundance of coal, and we are showing him where he can get that coal cheaply into Ontario, and by doing that, he will get good cheap coal, and we will be developing our coal industry.

By the Chairman:

Q. Just following that up a little. You say coal costs five dollars and forty-five cents in April?—A. In March. I think it would be a little cheaper in April for a couple of reasons.

Q. How is this coal disposed of? Where is the market?—A. The Government is taking a thousand tons a week, and the remainder they sell wherever they can.

Q. You mean the Government railways?—A. Yes.

Q. A thousand tons a week?—A. Yes.

Q. How is the balance disposed of?—A. They are tearing their hair trying to dispose of it wherever they can.

Q. They are disposing of it?—A. They cannot dispose of the output for six days, and that is the reason they are working four.

Q. But the actual output?—A. Yes.

Q. Where is it disposed of?—A. Most of it in the city of Halifax.

Q. What does it sell for there?—A. In Halifax?

Q. Yes.—A. They sell to some parties, like E. C. Henderson and Archibald, at the mines. They sell screen coal at the mines for eight dollars; run-of-mine, at the mines, for seven.

Q. That is the coal that costs five dollars and forty-five cents?—A. Yes. Eight dollars for screen coal, and seven dollars for run-of-mine. I would say in regard to that price for screen coal that really the company does not make as much on it as you would imagine, because a great deal of that coal is lost; it goes into the slack in the screening to the extent of about thirty per cent.

Q. As a business man, can you tell us what the coal at the mines selling for eight dollars could be delivered at Montreal for?—A. Well, I cannot tell you just exactly, but I know in nineteen hundred and—that coal you sold at the mines at eight dollars—well, you would have to charge up one dollar extra at Port Hastings.

Q. For freight from the mine to Port Hastings?—A. Yes, aboard the boat at Port Hastings.

Q. That is the shipping port?—A. Yes.

Q. That would make it nine dollars?—A. Yes.

By the Chairman:

Q. I think, if I remembered the evidence correctly, it cost a dollar and twenty-five cents to get the coal from Sydney to Montreal?—A. Yes.

[Mr. I. D. McDougall.]

Q. Would it cost any more from Port Hastings?—A. I believe it would.

Q. That would be ten dollars and a quarter for coal at Montreal? Your coal? A. At present prices? I may say this much that I was in conversation with the general manager of the Inverness collieries not long ago, and I asked him, "Look here, if the Government railway came down and said, 'We will take the whole output of your mine'"—they can produce a thousand tons a day there if they had a market for it, and deducting what they use for local purposes, would mean about eight hundred tons to sell to the Government—"what would you give it to them for?" and he said, "I would be perfectly willing to give them the whole output at five dollars and a half at the mine, or six dollars on board ship at Port Hastings—"

Q. But these Ontario consumers of coal to which we referred this morning—you suppose they would give that price to the Ontario consumers if they were available?—A. They would give it to anybody.

Q. Taking your own price: It costs five dollars and forty-five cents at the mine and taking into consideration the cost of transportation we find it will cost about ten dollars and twenty-five cents at Montreal. Of course, that makes it impossible for the Ontario people to consume Inverness coal?—A. In my opinion, one reason they have to charge a high price for the coal they do sell, is to try to offset the tremendous loss on the coal which they do not sell, and because of idle days.

By Mr. Douglas (Cape Breton):

Q. Is this not another reason why they are selling coal to the railways at that price?—A. Five dollars?

Q. Yes, and consequently, they have to charge a higher price on the additional coal which they market?—A. Yes.

Q. Which will be eliminated entirely if they had large contracts which would take care of the entire output at Montreal?—A. Yes.

The CHAIRMAN: You mean the producers in Nova Scotia are taking a loss on the coal they sell to the railways—is that the way the coal companies down there do business?—A. They are not able to do any kind of business just now. I suppose they have to make up that loss some way or other.

Mr. CHISHOLM: If they are going to keep the mine going at all, they have to take the railway contract.

By Mr. Maharg:

Q. Do I understand, Mr. McDougall, that an additional forty miles of railway will bring you to the inner side?—A. Bring it to Cheticamp.

Q. Would bring it around to the inner side of the island?—A. Yes.

Mr. CHISHOLM: The west side?

Mr. MAHARG: Yes.

By Mr. Maharg:

Q. Would that shorten the distance over the route it has to take now, en route to Montreal? How much?—A. I do not know.

Mr. CHISHOLM: Mr. Maharg, if you will look at the map it will give you some idea.

Mr. MAHARG: I am looking at it.

WITNESS: I do not know how much it would shorten it.

By Mr. Douglas (Cape Breton):

Q. It would mean a rail route about twenty miles shorter, and the total rail route or distance from Cheticamp to Port Hastings would be about eighty miles?—A. Yes.

Q. So it will really save about sixty miles, if it were shipped from Cheticamp? [Mr. I. D. McDougall.]

Mr. CHISHOLM: Yes, but he has reference now to the northern deposits, about eighteen miles farther,—eighteen added to sixty-nine is eighty-seven miles; that is the distance from St. Rose to Point Tupper—about seventy-seven miles, but if it went in the other direction to Cheticamp, it would only be about twenty miles.

By Mr. Cowan:

Q. The difference in the distance of water transportation does not make much difference, it is the difference on the land transportation.

Mr. CHISHOLM: There would be a very good shortening of water transportation too, if you will observe the map.

The CHAIRMAN: It is clear.

By the Chairman:

Q. You say the coal in March or April cost approximately five dollars and forty-five cents a ton. I understood you to say that some of that coal is sold at the mines at eight dollars a ton. Who are paying eight dollars a ton?—A. Some of the Halifax people who are ordering screen coal; they pay eight dollars.

Q. You mean to say the company is getting two dollars and thirty-five cents a ton more profit?—A. They are getting that price, but they lose thirty per cent of that in slack coal which they have to sell at a dollar and a half. They are losing that on that Government contract.

Q. That is their business. I do not think the Halifax consumers should be taxed to enable the coal company to sell to the railway at less than cost.

Mr. COWAN: There is a vast difference between run-of-mine coal and screen coal.

The CHAIRMAN: Let us get that clear.

Mr. CHISHOLM: Thirty per cent of the coal is taken out as slack coal.

WITNESS: Yes.

Q. And they sell it for a dollar and a half?—A. Yes.

Q. So seventy per cent is going on the market at eight dollars a ton?—A. Yes.

By Mr. Cowan:

Q. To whom did they sell their slack coal?—A. In a majority of cases, they would not sell it at all, and they are glad to sell it wherever they can. They have got a few thousand tons on the railway down there now.

Q. They have never made any attempt down there to briquette that slack?—A. Yes, they did, some time ago, but some way or other it did not work out very well.

Q. But the point is they are producing that coal in a month when they are running on short time, and under the most difficult conditions at \$5.45 on board cars?—A. Yes, five dollars and forty-five cents during the months of March and April.

By Mr. Maharg:

Q. That would bring the cost of your screen coal up to the neighbourhood of seven dollars per ton?—A. Making allowances for slack, thirty per cent loss, is the price they sell it at.

Mr. BLAIR: That is an average price of six dollars and five cents per ton.

Mr. DOUGLAS (Cape Breton): What is the average?

Mr. BLAIR: Six dollars and five cents.

By Mr. Cowan:

Q. Are these costs sheets a difficult thing to produce?—A. I would not say so.

Q. Are they a very heavy thing? Do they amount to much—Is there much book-keeping about them?—A. No.

Q. Of what do they consist? Simply a sheet of paper about two feet square?—A. Yes.

[Mr. I. D. McDougall.]

Q. You always have them ready on call?—A. Well, no, I would not say that they are always on call.

Q. But you can have them in a month's time? They are available each month?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. I suppose they are available in the case of the company for years back?—A. Yes.

Q. Kept in the General Office of the company?—A. Yes.

Q. Always kept, I suppose, as a matter of record?—A. I imagine they always keep a record of them.

By Mr. McKenzie:

Q. Mr. McDougall, I suppose you remember when there was no town of Inverness? Do you?—A. Well, hardly, I think I came into existence about the same time as the town of Inverness did.

Q. How long ago was that?—A. I am twenty-four years old. The town of Inverness came into existence about twenty years ago.

Q. When was the Inverness Railroad built?—A. It was completed in 1900.

Q. Well, we will begin there. There was no town of Inverness before that?—A. No.

Q. When did the mine take shape as a real entity as a coal mine?—A. I believe about 1900 and—there was a concern there before the railroad was built, William Penn Hussy.

Q. Oh, he was a speculator in stocks?—A. He was shipping a little coal there by boat from the harbour. I believe about 1904 or 1905; I would not be sure.

Q. Who was the first rail company?—A. MacKenzie and Mann.

By Mr. Cowan:

Q. Do they own the railroad now?—A. Yes but it is insolvent now—in liquidation.

By Mr. McKenzie:

Q. What became of the coal mine under the regime of MacKenzie and Mann?—A. What became of it? As a commercial proposition?

Q. Did it go along as a going concern, as a living entity?—A. It did, until about the first days of the war. It went into liquidation then.

Q. What became of it?—A. A receiver was appointed, the Eastern Trust Company—

Q. Oh, that was in the hands of a receiver many years before the war?—A. Yes.

Q. How long?—A. I cannot say exactly; some time before the war.

Q. Then of course it was run as a concern in the hands of a receiver?—A. Precisely.

Q. And then it got back to Mr. Henderson?—A. Yes, last July.

Q. And in a very short time it was back in the hands of a receiver again?—A. Personally, I would attribute that to the embargo.

Q. Now, Mr. McDougall, are there a large number of men who have settled around the coal mines?—A. Yes.

Q. That is a fact?—A. Yes.

Q. How many people, including men, women and children, are there altogether?—A. The population of the town?

Q. Yes, who are dependent on the mine?—A. They are practically all dependent on the mine. The population would be about three thousand or thirty-five hundred.

Q. Depending upon the operation of this mine?—A. Exactly.

Q. And their success depends largely upon the success of the enterprise?—A. Precisely.

Q. Is that not a fact?—A. Yes.

[Mr. I. D. McDougall.]

Q. Now, Mr. McDougall, is it not distinctly and clearly in the interests of these people that that coal mine should be a success?—A. Most assuredly, yes.

Q. Now, so far, financially, it has not been a success?—A. No.

Q. They are in the second receivership now?—A. Yes.

Q. What would you suggest as a means of putting that coal mine on a firm footing, successful for the owners of the mine, and to the men who are dependent upon it?—A. I would suggest that if the Committee has any power to make recommendations, when the allocation of contracts comes, that the Inverness Coal Mine should receive a substantial contract at a price that would warrant production.

The CHAIRMAN: This Committee has no authority to do that.

By Mr. McKenzie:

Q. Assuming, Mr. McDougall, that the management was normal, and all right—and our experience is that this company has gone twice into the hands of a receiver—does it not look as if they were selling their products too cheaply?—A. I think that one of the reasons why the Inverness costs—if we take the Inverness costs some years ago, we find in some sections of Inverness they did produce coal at a larger cost than five dollars and forty-five cents. The average cost before the mine went into the hands of a receiver was around seven dollars, and the reason for that in my mind was that they employed about seven hundred men in that No. 1 mine, and the ratio of producers and non-producers—that is, the contract miners and shift-men—was three shift-men to one producer, that is, every producer was carrying three dead men on his back. Now, they have eliminated that under this re-organization, and the effect is that the ratio is now almost man for man.

Q. My purpose in talking to you in this way is that I want to show that in order to give a living wage to our men in the province of Nova Scotia, we must sell our coal for some money?—A. Exactly.

Q. You realize that?—A. Exactly.

Q. So far, evidently the Inverness people have not been selling their coal for enough money, because they went to the wall twice—

Mr. DOUGLAS (Cape Breton): The management might have been to blame.

Mr. MCKENZIE: I do not know. I am assuming the management is all right.

WITNESS: I think, to a certain extent, that would go to show that the management was not exactly all right.

Mr. MCKENZIE: What I want to get at is this: There seems to be a wonderful desire on the part of some people to cut down what they have to pay for this coal. Is it not a fact that we must get good money for our coal to get good wages for our men?—A. Certainly, that is quite correct, but it is much better for the company to ask a reasonable price for their coal and get it, than to ask an unreasonable price and get nothing.

Q. Now, your own price is five dollars on the cars?—A. Five dollars and fifty cents at the mine.

Q. That is the actual cost of producing the coal?—A. No. We figured up that if the Government took the whole output—

Q. I am talking about the figures you gave. Do not try to get away from me, like that. That was your statement?—A. Five dollars and forty-five cents.

Q. Now, stand by that: Do not get away from that. That is the actual money you pay out in connection with the production of a ton of coal, is it not?—A. Yes, depreciation, depletion and so forth.

Q. Now, your capital is dead; you have no capital?—A. No.

Q. You are in the hands of a receiver?—A. Yes.

Q. Now, what capital—if you put a decent capital on the whole outfit there—what would it amount to?—A. You mean, what would they have to sell their coal for?

[Mr. I. D. McDougall.]

Q. What would the capital be? What money would be represented in the bank head, and the whole outfit you have there?—A. You would need to have the inner track to know how much money is invested in Inverness. The bond issue is supposed to be three million dollars, and about seven million dollars of stock.

Q. Supposing instead of this being in the hands of a receiver, it was operated by a concern which was going to give a decent return to the men holding, or supposed to hold this seven millions dollars of stock. How much would you have to add to the price of coal?—A. When I gave that suggestion before, I was quoting the General Manager down there. I assumed he knows his business—

Q. You are getting away from me again. Suppose you are now providing for a dividend for a small amount of five per cent on the seven million dollars of capitalization. How much more would you have to add to the price of coal?—A. When you interrupted me, I was going to say that I had no knowledge that seven million dollars was the right amount.

Q. I am taking your own figures.

Mr. CHISHOLM: He said three million.

By Mr. McKenzie:

Q. Well, take three million.—A. I do not know. It would be about fifty cents on the ton, I guess. We would have to add that on to the price of a ton of coal, because we are only working four days a week, so the costs go up. If they were working six days a week, you could produce cheaper coal.

Q. I am trying to maintain the life and integrity of a Nova Scotia product so the men dependent on it can make a living.—A. Yes.

Q. That is what I want to get at?—A. Yes.

Q. You realize, Mr. McDougall, that whatever is produced in any province—this is one of the key industries of our province, and the product should be kept at a fair living price.—A. Exactly.

Q. What is the good of trying to cut down the price of coal until we land in the hands of a receiver, and the people who put their money in it cannot get anything to pay them for their investment?—A. I am not trying to cut it down at all. I was just suggesting what they could sell coal for and make 50 cents a ton, if you take the whole output.

By Mr. Cowan:

Q. On a proper capitalization and under proper management, and working full time it would be away below that price?—A. Yes.

Mr. COWAN: I think your point is absolutely clear and understandable.

By Mr. McKenzie:

Q. It is costing now \$5 and how many cents?—A. \$5.45 in March and \$5.25 in April.

Q. Coal that is taken out of the mine and is taken away does not grow again.—A. They allow for depreciation and depletion 25 cents a ton.

Q. Do you say that coal in place is only worth 25 cents a ton?—A. I am taking the figures they allow for.

Q. Who are they?—A. The company at Inverness, the general manager, the auditors and the whole bunch.

Q. There is nothing there but the outfit of the receiver. Do you mean to tell me who knows very much more about coal than most men that a ton of coal in place is worth only 25 cents?—A. No, I do not.

Q. What are you telling us?—A. If you are setting aside 25 cents for depreciation, do you mean to say then it is the value of the coal?

Q. You are saying it, I am not.—A. I mean—

Q. You are not making any allowance for the value of the coal.

[Mr. I. D. McDougall.]

By Mr. Maharg:

Q. I presume that 25 cents per ton is what they figure the property has cost them. The property cost them so much in the first place, and they have an estimate as to the total amount of coal contained in that area.—A. Yes.

Q. And they have based that on 25 cents per ton?

Mr. COWAN: That is the price they paid for it?

By Mr. Maharg:

Q. That is what you figure it has cost them. When they take out a ton they allow 25 cents on the original cost?—A. That is what I understand, that is what I would do.

Mr. DOUGLAS: It has no reference to the coal that is left; it has reference to the coal that is taken out.

By Mr. McKenzie:

Q. I understand depreciation to mean the depreciation of plant. You use a large amount of plant in the production of that coal.—A. Yes.

Q. Does not everything, your engines, your haulage, ropes, your cages, and the whole outfit that you have in connection with that work—does it depreciate by use and exposure to weather and everything else?—A. Yes.

Q. And that is the depreciation you are talking about?

Mr. CHISHOLM: You might let the witness answer.

By Mr. McKenzie:

Q. You have only one depreciation. Is not that the depreciation in reference to the plant?

Mr. MAHARG: Depreciation and depletion.

WITNESS: Twenty-five cents are allowed in the company's cost sheets for depreciation and depletion.

By Mr. McKenzie:

Q. How do you divide that depreciation between actual loss in the plant and the cutting away of your coal?—A. I do not know how they do it. I think what they allow for depletion is 10 cents and for depreciation 15 cents.

Q. I think it is absolutely nonsensical to talk about the whole depreciation of your plant and the fact that you are cutting away your property as representing only 25 cents a ton depreciation. That is all in my eye. What I want to get at is—I want to see the town of Inverness a success and its people happy and contented with lots of money to live on. Do you not think that you should have more money, a better plant, and better prices than you have been getting in the past to get along?—A. We must have more work, anyhow.

Q. It is not a success as it is now?—A. It would be a success if we had—

Q. I am not talking about what it would be. I am as much an Inverness man as you are; I was born in Inverness much longer ago than you were. What I want to know positively is—there is no use in camouflaging—we must have better conditions in Inverness than we have to make it a success.—A. To make it a greater success than it is?

Q. It is not a success at all. Nothing is a success that is in the hands of a receiver.

By Mr. Cowan:

Q. How many tons of coal are supposed to exist in this mine? Do you know the estimated amount?—A. In the three tested areas, 120,000,000 tons.

Q. At 10 cents a ton that would provide a capitalization of \$12,000,000?—A. That is not all in Inverness.

[Mr. I. D. McDougall.]

Q. What I am trying to get at is whether 10 cents a ton is sufficient to cover depletion. Ten cents a ton would restore the entire capital, so I think it is a fair amount.

By Mr. Chisholm:

Q. You told us that by careful handling of the business since Mr. Killen and Mr. Henderson took hold of it, you have cut down the cost of production from \$7 to \$5?—A. To \$5.45.

Q. Is it the hope of the concern down there, by a continuation of this policy and by improving their business methods, to cut down still further the cost of production?—A. The cut would not be as great, but they hope to cut it down some.

Q. That is to say, you brought the load on your back down from 3. something to 1. relatively?—A. Yes.

Q. You spoke of development. That mine has been more or less neglected, has it not, in the matter of development?—A. Yes.

Q. Sacrificed, in fact. The cheap coal was pulled out of it, and that would make it a little more cumbersome for the future?—A. Yes.

The CHAIRMAN: Anything further to ask Mr. McDougall?

By Mr. Douglas:

Mr. McKenzie asked you some questions about capital, and I think you said there was supposed to be \$7,000,000 in stock and \$3,000,000 in bonds?—A. So I believe.

Q. Of course you have no idea of what money was put into the Inverness company? Have you any idea what Mr. Henderson purchased this property for last year?—A. \$1,500,000, I believe.

Q. And that included this railway of 62 miles?—A. Yes.

By Mr. McKenzie:

Q. He did not buy the railway, did he?—A. Yes, he bought the railway.

By Mr. Douglas:

Q. As well as the shipping piers?—A. The whole thing.

Q. And the railway, the whole thing?—A. The whole business.

By Mr. Chisholm:

Q. For \$1,500,000?—A. \$1,500,000.

The CHAIRMAN: The bond issues still stands against the property.

Mr. CHISHOLM: I do not think he paid for the bond issue.

The CHAIRMAN: It is about \$4,500,000 actual capital.

Mr. CHISHOLM: I would not like to say that.

By Mr. Douglas:

Q. Does the witness know that?—A. No.

Q. All you know is that he was purchasing the property for \$1,500,000.

Mr. CHISHOLM: I do not think there is a man on earth that knows the first thing about this combination. It is one of the off-springs of Mackenzie & Mann, one of the beautiful bouquets they gave Inverness.

By Mr. Maharg:

Q. You said that they lost on account of the embargo. Can you give us any definite figures as to what amount it did affect the sale of coal?—A. Mr. Henderson succeeded in making those contracts overseas. I think the contracts were for a portion of one year. I cannot just say as to the price, but it strikes me it was around \$15 at the pier at Hastings. It was a very, very high price anyway.

[Mr. I. D. McDougall.]

Q. Do you know the amount of those contracts?—A. I think it was for the total output of the mine.

Q. That would be up to 13,000 or 14,000 tons?—A. I think they were figuring around about 1,000.

Q. 1,000 tons per day?—A. Yes.

Mr. CHISHOLM: According to Mr. Henderson's letter to me he had a contract for 160,000 tons for the French Government, and according to his letter he was making a profit of \$6 a ton.

By Mr. Chisholm:

Q. Have you any idea why the embargo was placed on coal?—A. Why it was placed?

Q. Yes. It is a big question I know?—A. Perhaps you had better get Mr. Carvell to answer that. I do not know exactly. I guess they thought there might be a shortage of coal in Canada itself.

Mr. CHISHOLM: As a matter of fact, it did not remain on very long, just long enough to destroy our industry in Inverness. So they did not have a very clear conception of the shortage of coal in Canada when the embargo was put on. We have now a surplus of coal, and had it at the time the embargo was put on.

By Mr. Maharg:

Q. What was the date of the embargo?—A. August I think.

Mr. DOUGLAS: August 1.

Mr. CHISHOLM: Do you know when it was removed?

Mr. DOUGLAS: At the end of the year I think.

Mr. CHISHOLM: There is an impression that the embargo was removed at the instance of the big corporations to relieve them of some contracts.

The CHAIRMAN: The witness cannot possibly have any information on that.

WITNESS: I cannot have anything except rumours that it was put on at their instigation.

By the Chairman:

Q. The run of green coal at the mine is sold at what?—A. \$7, except the Government orders which is sold at \$5.

Q. And it costs—A. \$5.45.

Q. And \$5.25 in April?—A. Yes.

Q. That is \$1.75 difference between the cost and the selling price?—A. Yes.

Q. That is a pretty good profit on coal, is it not?—A. Yes, it would be a good profit.

Q. The American Companies are satisfied with a profit of from 30 cents to 70 cents per ton?—A. Well, according to my interview with the manager they would be satisfied with 70 cents at Inverness.

Q. Would it not be better for the company to use their energies in securing new markets?—A. Would it be better than what?

By the Chairman:

Q. They charged a high price at the mines, and then limit the market,—you cannot compete with American coal in Quebec at that time, and you cannot compete with American coal in Ontario at that price?—A. They are perfectly willing to come down if they can get the coal.

Q. It is largely a matter of price under competing conditions—

By Mr. Douglas (Cape Breton):

Q. You feel that the best they can do is to sell at a certain price, but if they had a larger output your argument is that they could meet costs?—A. Exactly.

[Mr. I. D. McDougall.]

By the Chairman:

Q. Supposing the company to a man co-operated in reducing the cost by increasing the output, that would open up new markets for the coal which are not now available, but which would be if the price were reduced?—A. There is not very much encouragement in increasing production when we cannot sell what we produce.

Q. In that way, would it not be a good policy, in order to open up the new market, such markets as might be available, if the men urged that upon the company—would it not be a good policy?—A. For increasing the output?

Q. Yes, and thus reducing the cost and locating new markets?—A. Yes, they are both perfectly willing to co-operate in that respect if they could get the markets.

Q. In that respect, there is a good spirit between the men and the management?—A. Yes, very good.

Q. With a view of carrying out what the Chairman has just suggested?—A. Yes, a good spirit.

The CHAIRMAN: Are there any further questions to ask the witness?

The WITNESS: I may say, Mr. Chairman, in regard to these costs: I was frank and open in bringing them here, but I would not want them spread broadcast if the costs have not been obtained from the other companies and have not been published. You are at perfect liberty to publish them when the costs from the other companies are published, but even though I have no connection with the company I would not want to see them put in a disadvantageous position by having their costs published, until the Dominion Coal Company's costs are published. I would ask that they be not published.

By the Chairman:

Q. You think the costs of one company should not be made public unless the costs of all of the companies are published?—A. Precisely.

Q. Do you think the men would desire to follow that policy?—A. I am not in a position to say, but I think it would be a good thing for them.

The CHAIRMAN: Are there any further questions to ask this witness?

By Mr. Douglas (Cape Breton):

Q. And particularly so on account of the large companies practically dominating the whole situation, and producing about 85 per cent of the whole output of fuel?—A. Exactly.

Q. You take the position that it would be quite unfair to this company?—A. That is the reason, yes.

Q. And the reason, Mr. McDougall, that the months of March and April are the months when you are operating under some disadvantages, and that increased the cost, and I suppose it would be rightly admitted by you that the costs would be much greater in March and April than in the summer months?—A. If the men were working regularly, they would not.

Q. Yes, even apart from that?—A. As I said, the costs before last March were a good deal higher, because the rearrangement of the working forces had not taken place, but taking them this summer, if working regularly, I would say that cost would be much lower.

By the Chairman:

Q. Let me ask you this, Mr. McDougall? I think you will admit, as every person will admit, that in order to sell Inverness coal in any enlarged market it would have to be sold at a price no greater than the competing coal. Which policy do you think the men would favour in order to get the price of coal down, such a price as would meet the competition with other coal? The prices evidently will have to be reduced.

[Mr. I. D. McDougall.]

Would the men be willing to co-operate in the reduction of the prices by reducing their wages; in this way, would the men prefer to work six days a week at a less wage per day than they are now getting, in order to reduce the cost of coal, or would they prefer to work three or four days a week at the present wage?—A. My argument is that there is no necessity of reducing wages if they are working six days a week, because the cost would be considerably lower if they were working six days a week and could get the market for their coal.

Q. But you cannot get the market?—A. No.

Q. The great obstacle is the price of coal?—A. I don't know—

Q. Everybody is looking for cheaper coal than the coal they are now able to buy.

A. The real thing that will make the cost in Inverness go down is to stimulate production, additional production, and there is no necessity, in my mind, to reduce the wage rate by putting it on a competitive basis.

Q. I am not suggesting that that should be done, but that would be one means of reducing the cost of coal?—A. It would not be mine.

Q. You would not favour that?—A. I would not favour that.

The CHAIRMAN: Any further questions?

By Mr. Douglas (Cape Breton):

Q. Are they working under the Montreal agreement?—A. No, they never got the Montreal agreement.

Witness retired.

The CHAIRMAN: That completes our list of witnesses for to-day.

By Mr. Maharg:

Q. Do you remember I was speaking the other day about calling Mr. McDougall, of Montreal, here for either Thursday or Friday, was that done?

The CHAIRMAN: That is, Mr. McDougall of the C.P.R.?

Mr. MAHARG: Yes.

The CHAIRMAN: No, that was not done, and for this reason. The programme at that time seemed to be completely filled up, for those days, and we were anticipating certain witnesses to be here, but those whom we anticipated to attend did not attend, I am referring now particularly to Mr. White, of the Conservation Commission, but they failed us. I regret that we did not call Mr. McDougall, because we thought we would have no time.

Mr. MAHARG: The assurance was given by me that I did not think Mr. McDougall would require over 20 minutes or a half hour, and he could have been worked in, just the same as other witnesses have been worked in, we have had a number of witnesses here who have just dropped in, as it were, who were never called, and no instructions given or anything else. They have been worked in without any trouble and I think that Mr. McDougall could have been handled in the same way.

The CHAIRMAN: It was simply because we did not anticipate we would have the time.

Mr. MAHARG: It was understood that this witness was to be brought here.

Mr. McKENZIE: I think so.

Mr. MAHARG: I would like to have him called.

The CHAIRMAN: I think it is only fair that he should be here.

Mr. McKENZIE: Yesterday, Mr. Chairman—

The CHAIRMAN: I have the report of the Parliamentary Counsel here—

Mr. McKENZIE: Before you get at that, I want to say something about the dispute.

that arose between myself and Mr. Keefer, yesterday, about the admissibility of certain documents. I gave it as my opinion that certain documents I thought might be received by this Committee, but I said they were not evidence. I am always very careful about any statement that I make involving the law. In fact, everybody should be careful about any statement they make whether it is on law or upon fact, but he ought to be very careful about any statement he makes about the law. I have here in my hand Taylor on Evidence, regarded as the highest English authority on the question of evidence, and I am reading from section 1781 on page 1286, where that famous author deals with the exact points we were arguing yesterday. I read from Taylor on Evidence as follows:—

“The admissibility of the books of a corporation depend at common law on the nature of the Acts reported. If these are obviously of a public character, and the entries have been made by the proper officer, they will be received as evidence either for or against the corporation, but if they are related to the private transactions of a corporate body, they will be inadmissible, except perhaps in an action between the owners or members of the corporation.”

That is the law, Mr. Chairman, and I am simply quoting that to show that I was not trying to pass off any camouflage on the Committee yesterday.

The CHAIRMAN: Perhaps this matter Mr. Maharg brought up—I am perfectly frank when I say that I am entirely responsible for Mr. McDougall not being called. I think it was hurriedly suggested by Mr. Maharg, during the confusion that usually attends at the closing of our Committee meetings. The Committee did not pass a motion, and Mr. Maharg told us that it was quite important to see that he was called, but as you are aware the last few days have been so uncertain that we did not know anything as regards the attendance of our witnesses, that I perhaps did not give it the attention I should have. I do know that if all the witnesses had attended the days would have been absolutely full. I must confess for a day or two it escaped my memory, but that was in my mind when I did think of it. If it is the desire of this Committee that he should be still called, I presume that we can still hear him. I might say, in addition, that there were two other witnesses, witnesses on the question of water transportation, who were included in our list, and both of them were unable to come, so that it left a great blank in the witnesses that we had already decided upon.

Mr. BLAIR: What is the nature of Mr. McDougall's statement?

Mr. MAHARG: Referring particularly to the western conditions. He is a native of the West, practically. He is the general agricultural agent of the C.P.R. He lived in that coal area all his life, south of Calgary, and understands the situation out there thoroughly.

By Mr. CHISHOLM: What is your programme now?

The CHAIRMAN: We have no definite programme at all.

Mr. CHISHOLM: Why not hear him?

Mr. DOUGLAS (Cape Breton): If Mr. Maharg desires to hear him, I think the Committee will be very glad to have him called. I, for one, will be perfectly willing to hear him.

Mr. MAHARG: He is in the employ of the company, and is not very far away, and he said he would be here any time next week.

The CHAIRMAN: Is it the desire of the Committee that Mr. McDougall of the C.P.R. be called for Monday?

Mr. MAHARG: I would move that he be called.

Mr. DOUGLAS (Cape Breton): I second the motion.

The CHAIRMAN: Moved by Mr. Maharg, seconded by Mr. Douglas, that Mr. McDougall, the General Agricultural Agent of the C.P.R., be summoned as a witness to appear before this Committee on Monday, May 16th, at 10.30 o'clock.

Carried.

The CHAIRMAN: Now, you will remember yesterday that we had some discussion followed by a motion passed by the Committee, appointing the Chairman and Mr. Douglas to consult with the Parliamentary Counsel and to have him submit a report to this Committee—as to the procedure in the case of the witnesses who had not appeared in response to our invitation. I have before me the report of the Parliamentary Counsel, which I shall read to the Committee.

May 14th, 1921

M. STEELE, Esq., M.P., M.D., Chairman of the Special Committee to inquire into all matters pertaining to the future fuel supply of Canada.

SIR,—Upon your reference of the question as to the powers of the Committee, I beg to submit that the Committee has power under the order of the House appointing it to send for persons, papers and records, but only for the purposes mentioned in the order, namely, the enquiry “into all matters pertaining to the future fuel supply of Canada.” If any witness refuses to attend or to produce the papers and records required the Committee can report such refusal to the House and the House may deal with the offender in the same manner as if he had been guilty of a similar contempt to the House itself (May 429, Bourinot 482.)

In the present case the presidents of certain coal companies have been summoned and required to cause certain named officers of the companies to attend before the Committee and there produce certain papers, but the officers themselves have not been summoned. This course does not appear to the undersigned to be regular or usual, and he is of opinion that the legal course would have been to have summoned the proper officer of the company to attend and bring the papers.

This irregularity can, of course, be speedily rectified, and the principal question upon which doubt exists is whether the Committee in view of the terms of the order of the House has power to require the attendance of these officers with the costs sheets showing the cost of production of coal per ton from 1912 to date, that is to say, is cost of producing coal in the past a matter pertaining to the future fuel supply of Canada? It appears to me, that the future fuel supply of Canada, that is to say, the available supply and the extent of territory in Canada to which it will be available depends upon the price for which it can be supplied, and that one of the important items in that price is the cost of mining, and that any enquiry that will show what that cost is likely to be is a matter relating to the future fuel supply of Canada, and within the terms of the order of the House. I may add that if the Committee considers that it has not sufficient power to successfully and satisfactorily conduct its enquiry, the best course in my opinion would be to obtain from the House such additional powers as it deems desirable.

The whole respectfully submitted.

(Signed) FRANCIS H. GISBORNE,
Parliamentary Counsel.

May 14, 1921.

By the Chairman:

Q. You have this report which has been asked for by the Parliamentary Counsel before you, what do you desire to do?

Mr. DOUGLAS (Cape Breton): Summon the right men. That is the only thing we can do.

The CHAIRMAN: That is our only course. That is the only mistake we have made, that we did not properly summon the right parties.

Mr. MAHARG: How are we to take the latter part of that report, where it states that if the Committee considers it has not got the power? I thought that one

of the reasons we were making an inquiry of the Parliamentary Counsel was to know if we had that power, the power to call these people.

Mr. DOUGLAS (Cape Breton): He expresses the opinion that we have, but if the Committee does not care to take that opinion—that is the construction I place on it—there is no doubt about the matter. It will be quite all right to leave it to the House of Commons, but it seems to me that it is expressed that we have the power.

The CHAIRMAN: We have the power to summon and to call them, but we have not the power to compel their attendance. That power must be obtained from the House. That is, the power must be obtained from Parliament.

Mr. COWAN: In other words, we can issue a summons, and if they do not come we must report back to the House.

The CHAIRMAN: Yes, and secure an order of the House to secure their attendance.

Mr. COWAN: Who are these officials?

Mr. DOUGLAS (Cape Breton): One is Mr. McColl, and Mr. Gordon.

Mr. COWAN: Where do they live?

Mr. DOUGLAS (Cape Breton): Well, their ordinary residence is New Glasgow and Glace Bay, respectively.

The CHAIRMAN: I think what the report of the Parliamentary Counsel does not decide, and cannot decide, is as to whether or not this Committee has authority, under the reference, to go into the investigation as to the cost of producing coal in the mines.

Mr. COWAN: I should judge that this says very distinctly that we have the power. That is my conception of it.

The CHAIRMAN: Some have that opinion, and some have the opposite opinion, so the only place that we can have that decided is in the House.

Mr. HOCKEN: Can we make that inquiry in the House to-day, and make a report to the House and ask them?

The CHAIRMAN: I am not sure whether we can make it to-day or not. I think the procedure would be to ask the House to determine whether or not we have authority.

Mr. HOCKEN: I believe the first thing is to decide whether we want these men here; whether we are going to force them to come here.

The CHAIRMAN: Yes.

Mr. COWAN: I cannot, for the life of me, see why we have to go back to the House when the Parliamentary Counsel says distinctly that we have that power.

The CHAIRMAN: Yes, but his decision does not give us that power. He gives his opinion, as any other individual would give an opinion.

Mr. COWAN: He says that Parliament has already given us the power.

The CHAIRMAN: But that does not give us the power. He gives that as his opinion, but that fact—the fact of his giving that opinion does not give us that authority. His opinion is no more valuable in that regard than mine, or yours, or the opinion of any other person.

Mr. HOCKEN: Let us assume that we have the authority.

Mr. DOUGLAS (Cape Breton): We assumed that we had the authority when we notified these officers before. That was a resolution of the Committee calling on these persons to present themselves and to bring the documents. That was the opinion of the Committee then, that we had the power.

The CHAIRMAN: Yes.

Mr. DOUGLAS (Cape Breton): The statement is made that the Committee has just the same amount of power to-day as it had at that time.

The CHAIRMAN: They have the same right to have their opinion, but that does not give them the power. The Committee may be wrong in that opinion. I am not saying that they are wrong, but they may be wrong.

Mr. HOCKEN: The question is to find out——

The CHAIRMAN: From the House——

Mr. MAHARG: The House can determine what the intention was.

Mr. HOCKEN: How quick can they do that?

The CHAIRMAN: I am not very sure of the procedure.

Mr. MAHARG: I believe in matters of this kind——

Mr. MCKENZIE: It seems to me, following this communication you have, that you have to subpoena those men, whomever you decide to subpoena, and if they come here and bring the papers, and give the information that we are looking for, all well and good. That is all, and they are all right, and there is no trouble whatever. But supposing they come in, and they do not bring the papers, then they shall have disobeyed the summons of this Committee. We can put Mr. Gordon on the stand, and ask him why he did not bring the papers, and if he says: "I am not going to bring them; I am advised not to bring them," then that is a matter immediately to be reported to the House. At the present time, we are at the end of our tether, we have no compelling power, we cannot say to the witness: "If you do not answer we will put you in the tower until you do answer." Only the House can do that. Now, if Mr. Gordon or Mr. McColl comes here without the papers, and say they will not bring the papers, then if we think it advisable to take that course, we will report the matter to the House, and the proper authority will issue from the Speaker to arrest those men and compel them to bring their papers here. There is where the power comes in, so it seems to me we have nothing to report to the House until these men will really be summoned to attend here, and refuse. That is, as I understand the opinion filed here this morning. So far, according to the Parliamentary Counsel, we have not put ourselves in the position of going to the House.

Mr. COWAN: That is exactly the position I take, that, under that opinion, as given to us by the Parliamentary Counsel, the proper thing for us to do is to properly summon these people and then if they refuse we can act.

Mr. MCKENZIE: We cannot act——

Mr. COWAN: We can go back to the House, and make our report.

I will move that a summons be issued to them—to Mr. McColl and to Mr. Gordon, officers of this company, to appear here next Tuesday morning at 10.30 o'clock.

Mr. DOUGLAS (Cape Breton): I second that motion.

Mr. COWAN: Can a summons of that kind be served by telegram?

Mr. MCKENZIE: You say "of the company"—what company do you mean?

Mr. COWAN: The Dominion Coal Company and the Nova Scotia Steel Company.

Mr. MCKENZIE: We do not want to get in wrong. The Dominion Coal Company is no longer in existence, and the Nova Scotia is no longer in existence.

Mr. COWAN: I think we had better call this the British Empire Steel Corporation.

Mr. MCKENZIE: Yes.

Mr. DOUGLAS (Cape Breton): But I think the constituent officers remain as before. I do not think any of these men are officers of the British Empire——

Mr. MCKENZIE: I think you will find that Mr. McDougall, who was president of the Nova Scotia Company, is now the first vice-president of this new concern. I believe this man Gordon, who was an accountant——

Mr. DOUGLAS (Cape Breton): No, I don't think he is now the accountant—I think he is the auditor——

Mr. COWAN: I move, seconded by Mr. Douglas,—

“That a summons be issued to Mr. Archibald McColl, Secretary-Treasurer of the Nova Scotia Steel & Coal Company, and to R. Gordon, auditor of the Dominion Coal Company, to appear before this committee to give evidence and produce the documents referred to in resolution of April 21st, at 10.30 a.m. on Tuesday, the 17th inst.”

Mr. DOUGLAS: That was the last resolution calling for the original cost sheets.

The CHAIRMAN: I think you will have to amend that. We have no resolution specifying these men.

Mr. COWAN: We have a resolution specifying the documents.

The CHAIRMAN: You had better not refer to the resolution, because there are two resolutions.

Mr. DOUGLAS: That is the reason why we state that date. It is the second resolution. Assume that they have gone ahead and made certain arrangements in regard to these particular documents, they know just what is wanted. We are not deviating from the terms of what we originally wanted.

The CHAIRMAN: The resolution passed on 26th April was:—

“That the auditors of all coal companies appearing before this Committee do personally attend with the original cost sheets mentioned in the resolution of April 21st for the purpose of examination thereon.”

Mr. MCKENZIE: We are perhaps commencing a procedure that will be far reaching in its effect, and I do not want to be a party to any bungling of procedure. Supposing you bring Mr. McColl here, and he goes on the stand, and you ask him “Why have you not brought the sheets?” He says, “I have nothing to do with the sheets. I cannot bring any property belonging to the company.” In law that is absolutely correct, so that if you are going after any property of the company, you had better go after some man who has control. Mr. McColl is the auditor, but if you want the man who can remove the property belonging to the company, you had better go after the president. He could not make any excuse that he could not bring it here, but McColl or any subordinate cannot take away books out of the office of the company and bring them here.

Mr. DOUGLAS: I think Mr. McKenzie's suggestion is a good one. We can include Mr. McDougall's name.

Mr. MCKENZIE: You can go after him for the production of papers, and produce the other man as a witness. If we have to go before the House of Commons, I do not want to be a party to anything that would not be right.

The CHAIRMAN: As the committee well know my views, I need not repeat them now. I think the committee would be well advised to maintain—what shall I say—the good sense that has been displayed so far. This committee, if I may express it to the modest members of the committee, has won throughout the country a good deal of admiration and a good deal of commendation for the investigation, and the methods by which it has been carried on. I hope that that feeling will not be destroyed now by entering into anything which may—I do not say it will—but which may put the committee in a very ridiculous light before the country. If the information desired is so absolutely essential to the work of the committee that it must be had, then I think the committee would be quite justified in taking a chance of putting itself in a ridiculous position. But if such information as the committee desires can be got without taking that chance, I think it would be very wise to adopt a method which will not expose us to the chance of making ourselves ridiculous. Before passing such a motion as is proposed, I think the Committee should give very serious consideration to the whole matter.

Mr. MAHARG: In what way, Mr. Chairman, do you think we would make ourselves ridiculous? If you have something in your mind which some of us at least may not possess—

The CHAIRMAN: I cannot conceive any other effect of the action of the committee in case it is necessary to follow it up to a conclusion and ask the House to ask these men to appear at the bar of the House and give reasons why they did not respond to the summons of the committee. That is a thing which has been done only on a few occasions in this country in the past, I think on only one occasion that I recall, in regard to a witness appearing before a committee; and while I cannot speak for the House as a whole, I rather think that very many members would acknowledge now that perhaps it would have been better if it had not been done in that case.

Mr. MAHARG: It seems to me that we are taking a chance of being put in rather a ridiculous position if we back down now after having asked them to produce those documents.

Mr. COWAN: Hear, hear. We will make ourselves simply ridiculous in the eyes of Canada.

The CHAIRMAN: I have just expressed my view. The Committee has chosen its course so far, and I am not putting any obstacle in its way.

Mr. MAHARG: I was not here when the original action was taken, and I was not in a position to judge the attitude of the men, but from what some of the members have stated, they at least are of the opinion that there was an attempt to treat the committee rather shabbily as it were. I take it for granted that that was the feeling of the members, and that they do not intend to submit to it. I am perfectly satisfied to take a chance.

Mr. MCKENZIE: At the risk of being misunderstood and misrepresented, as I have been right along in the committee, I beg to tell my good friend Mr. Maharg that if this company as advised yesterday, or at least as we were advised by Mr. Chrysler, that they were relying upon a legal technicality, and they are so advised and are resting their case upon that advice in refusing, as they are refusing, to do what we asked them to do, we must not for a moment think that they are affronting us at all. They are advised that they are doing what the law allows them to do, and that we are asking them to do something they are not obliged to do. They are taking counsel on that, and they are evidently resting their case on that advice. If they are doing that, we must not for one minute suppose that they are affronting us. They are doing nothing of the kind. A judge on the bench would not think he was affronted if counsel told a witness "do not answer that question, you are not obliged to"; that witness in refusing to answer would simply be standing upon his legal rights under the law. If this company says that on the advice of their counsel they are not obliged to give this information—I am not saying that they should not give it—but in refusing to do it on the advice of counsel they are not affronting us in the slightest degree. That at once appeals to a lawyer though it may not appeal to a layman.

Mr. MAHARG: A few days ago we had a responsible director of that company here and when he was asked to make some explanation as to the delay he said among other things that Mr. Wolvin did not even communicate the request to this gentleman by the name of McDougall, that it was just a day or two before this statement was made here that Mr. McDougall had been informed of it, and apparently Mr. Wolvin was in the Old Country about that time. Now, that would look as if there was just a little bit of play going on there.

The CHAIRMAN: Of course, the committee should not forget this fact that we had the presidents of these companies before us, and when we had them here the Committee did not insist on their answering questions regarding costs, which possibly they might have done. I do not say that they would have done so, but we did not insist on them giving information as to the costs. Now it does seem to me rather a

peculiar action, the committee having failed to do that, that we now threaten to enter upon proceedings which will require Parliamentary sanction and Parliamentary action before we are through.

Mr. MAHARG: It may possibly require Parliamentary action.

The CHAIRMAN: Possibly, yes.

Mr. COWAN: It is moved by myself, seconded by Mr. Douglas:—

“That a summons be issued to Mr. D. H. McDougall, President of the Nova Scotia Steel and Coal Company, and Vice-President of the British Empire Steel Company and to Mr. Archibald McColl, Secretary-Treasurer of the Nova Scotia Steel and Coal Company, Limited, and Mr. R. Gordon, auditor of the Dominion Coal Company, Limited, to appear before this committee to give evidence and produce original cost sheets of their respective companies from 1912 to date and all such other documents as relate to the cost of production of coal, at 10.30 a.m., Tuesday, the 17th inst. and from day to day thereafter as required by the committee and until discharged.”

Mr. McKENZIE: If we are going to complete the list, should we not have some to men in the Dominion Coal Company. You have not got them.

Mr. COWAN: These are the names given to me. Personally, I do not know the situation.

Mr. McKENZIE: Mr. Gordon is in the same position as Mr. McColl. He could say “I have no control over the books; I am an accountant there.” We should get somebody who cannot make that excuse.

Mr. DOUGLAS (Cape Breton): I think it concluded in this way, that Mr. McDougall was named as the President of the Nova Scotia Coal and Steel Company, and also named as President of the British Empire Steel Company.

Mr. McKENZIE: You will be met immediately with the statement that the British Empire Steel Company have no pay sheets, as they have only been doing business for the last two weeks.

Mr. COWAN (reading): “And E. P. Merrill, General Manager of the Dominion Steel Corporation, and H. J. McCann, General Manager of the Dominion Coal Company.” Now, are there any others in Nova Scotia? If you are going to have anybody else—I cannot see that it is necessary, but if Mr. McKenzie wants them all, all right. I do not think any committee can afford to be treated as this body has been treated. We would look absolutely silly in the eyes of the whole country, if we allowed this company to come here and tell us we had nothing whatever to do with them.

The CHAIRMAN: It is moved, by Mr. Cowan, seconded by Mr. Douglas, that summons be issued to Mr. D. H. McDougall, President of the Nova Scotia Steel and Coal Company, and Vice-President of the British Empire Steel Company and to Mr. Archie McColl, Secretary-Treasurer of the Nova Scotia Steel and Coal Company, Limited, and Mr. R. Gordon, auditor of the Dominion Coal Company, Limited, and Mr. E. P. Merrill, General Manager of the Dominion Steel Corporation, and Mr. H. J. McCann, General Manager, Dominion Coal Company, to appear before this committee to give evidence and produce original costs sheets from 1912 to date, and all such other documents as relate to the cost of production of coal at 10.30 Tuesday 17th instant, and from day to day thereafter, as required by the committee and until discharged.

What is your pleasure in regard to that motion?

Mr. COWAN: I understand this resolution has been moved simply to cover a legal technicality brought forward by Mr. McKenzie. If any one of these men will come here and produce their costs sheets, I will be satisfied. I do not want to put the company to the trouble and annoyance of having all these men come here. All I want are the papers originally called for.

Mr. McKENZIE: I do not want Mr. Cowan to say that I am raising a technicality. I am providing against being "bawled out" when we reach the House of Commons by being told that we did not do the right thing here. If we have done everything we can do here, then we can go to the House of Commons, because there will be plenty of people to criticise our actions when we get down there, and we want to say we did everything we could, and called for the right men. That is not a technicality.

Mr. CHISHOLM: That is avoiding a technicality.

Mr. MAHARG: I suggest that you put the room number and the building, that they "shall appear in room so-and-so, House of Commons."

Mr. McKENZIE: I would call that a technicality.

The CHAIRMAN: Is it the pleasure of the committee to adopt this motion?

Mr. MAHARG: Does the room number and the building go into that?

Mr. DOUGLAS (Cape Breton): That will be included in the summons.

Mr. COWAN: All right. Put in "Room 425, House of Commons," in the right place.

Mr. McKENZIE: There is a western technicality for you.

Mr. COWAN: We do not go so much on red tape in the west, we get after the sense of things. That is all I want here.

Mr. McKENZIE: We might put in "Ottawa," too.

The CHAIRMAN: I will read the motion again.

Moved by Mr. Green, seconded by Mr. Douglas (Cape Breton), that a summons be issued to Mr. D. H. McDougall, President of the Nova Scotia Steel and Coal Company and Vice-President of the British Empire Steel Company, and Mr. E. P. Merrill, General Manager of the Dominion Steel Company, and Mr. H. J. McCann, General Manager, Dominion Coal Company, and to Mr. Archie McColl, Secretary-treasurer of the Nova Scotia Steel and Coal Company Ltd., and Mr. R. Gordon, auditor of the Dominion Coal Company, Ltd., to appear before this committee to give evidence and produce original costs sheets of their respective companies from 1912 to date, and all such other documents as relate to the cost of production of coal at 10.30 a.m. Tuesday, 17th instant, at Room 425, House of Commons, Ottawa, and from day to day thereafter as required by the committee and until discharged."

Is it the pleasure of this committee to adopt this motion? Is the committee quite satisfied with the procedure suggested in this.

Mr. HOCKEN: I believe so.

The CHAIRMAN: Is it the pleasure of the committee to adopt this motion?

Carried.

The CHAIRMAN: Is there any further business to come before the Committee this morning? If not we will adjourn until Monday.

The committee adjourned until Monday morning, May 16, at 10.30 a.m.

COMMITTEE ROOM No. 425,

HOUSE OF COMMONS,

MONDAY, May 16, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m. Mr. Steele, the Chairman presiding.

The CHAIRMAN: We are to hear Mr. Dougall of the C.P.R. to-day.

J. DOUGALL called, sworn and examined.

Q. What is your official position?—A. General Agricultural Agent of the C.P.R.

Q. How long have you held that position?—A. Since 1915, August.

Q. What are your duties in that position?—A. My duties are largely in connection with the markets and the increased production of live stock and farm products at the same time. I do some minor investigations.

Q. You cover the whole of Canada?—A. To some extent, yes.

Q. Have you prepared a statement for the committee?—A. No, nothing at all.

The CHAIRMAN: Mr. Dougall is now before the committee for examination.

By Mr. Maharg:

Q. You have had considerable experience of mining conditions in the west previous to your coming east, have you not?—A. Yes, 20 years.

Q. Can you just give to the committee a general statement of the general situation, as you see it, from your point of view?—A. You mean as to the general condition of the whole country?

Q. Yes.—A. As far as tonnage is concerned, I may say this: When I went to Alberta first in 1889 there were only three or four coal mines operating in that province, and there were a couple in Saskatchewan at Bienfait and Souris. You will find that in 1901 the output of the whole Northwest Territories as they were then called was 346,600 tons, whereas the output for Alberta alone was 6,578,000 tons. As I understand it, the statement has been made that these mines are largely operated by farmers and so forth. There is nothing further from the truth than that. I have a few figures here which show something about the tonnages, and in discussing the coal situation for the west one has to be careful because we have a varied number of coals, that is different qualities. Some are pure lignite, some are sub-bituminous, some bituminous, and some semi-anthracite. Now in discussing the general coal situation we cannot say, "here is the price of coal as sold". You must take the coals as you find them, what their uses are, and what the relative values of those coals are for consumption. I remember distinctly that when we first started to operate in Southwestern Alberta, we started a prospect there for bituminous coal, and we were told there was not enough market in Canada for those mines. Last year, 1920, that district produced 1,775,000 tons of bituminous steam coal, within 20 years of the time we were told there would be no market, and it was all sold.

Q. Probably you can give us an opinion as to why that market was made available.—A. There are several reasons for that. The railways use, I suppose, 80 per cent of that steam coal, and in those figures I have just given you the C.P.R. use the

largest amount. They get nearly all their supply from that district. The Canadian National Railways get their coal largely from the Brazeau district, and the district adjacent to the Grand Trunk Pacific.

Q. Just there, who owns the mines from which the C.P.R. get their coal there?—A. The mines on the Crow's Nest Pass in Alberta. I want to make that very clear because there are some mines on the Crow's Nest Pass Line in British Columbia which are in district 18, for instance the Crow's Nest Pass Coal Company. But the mines from which the C.P.R. get their coal in Alberta are all Canadian companies, with the exception of one, the West Canadian Collieries Limited, which is a French corporation with its head office in London. It is a purely French company. The capital is all French, but its offices are in London. It is incorporated under a British Act.

Q. Are they large producers of coal?—A. The West Canadian Collieries produced last year 700,000 tons at the two mines, one 372,000 tons and the other 383,000. That is all French capital. The rest are all Canadian companies, none owned by the C.P.R.

Q. None at all?—A. Not one. I could give you a list of the directors if you wish.

Q. You get all your supplies from those mines; do you get any from the Brazeau mines?—A. None.

Q. Do you know anything of the ownership of the mines up in that country?—A. Originally they were owned I believe by a Mr. Nordegg and Mr. Mackenzie. I do not know who owns them to-day.

By Mr. Ross:

Q. Who owns the mines in district 18?—A. Those mines are all in district 18.

Q. You spoke of some in Alberta and some in British Columbia?—A. Yes, the Crows Nest district in British Columbia is in district 18.

Q. Who owns these mines?—A. The Crows Nest Pass Coal Company. The stock of them is largely owned by the Great Northern Railway.

Q. What is that a subsidiary of?—A. I presume the Great Northern, although it is a Canadian, a Toronto company. They get practically all their western fuel supply from the Crows Nest Pass Colliery in British Columbia.

By Mr. Cowan:

Q. The Great Northern Railway?—A. Yes.

Q. That is an American railway?

By Mr. Chisholm:

Q. Is that what is familiarly known as the Jim Hill Railway?—A. Yes.

By the Chairman:

Q. Are you using British Columbia coal?—A. Yes.

Q. You practically get all your coal from the Crows Nest Mines?—A. Just the collieries in the Prairie Provinces.

By Mr. Cowan:

Q. Does not the C.P.R. own any mines down through Southern Alberta?—A. No mine on the Crows Nest Pass.

Q. They have no interest in the mines at Lethbridge?—A. Yes, but that is not steam coal. At Lethbridge that is domestic lignite coal.

Q. They do not use their product on their lines themselves?—A. No, Sir.

By the Chairman:

Q. You spoke of the Brazeau mines. What do you mean by that?—A. That is the Brazeau district. It is on a branch line of the Canadian National Railways from Warden into the mountains.

[Mr. J. Dougall.]

Q. Is it convenient to the Canadian National Railway?—A. It is quite convenient to the Canadian National for the supply of coal.

Q. Are all the mines in that district?—A. There is only one mine in that district.

Q. I would not like to dispute with you, but I would like to clear up that matter. I know of other mines in the Brazeau district.—A. There is only one steam coal mine. I have been all through that country on foot and on horseback. There is a little mine known as the Saunders Creek, which is a sub-bituminous mine, from which the railways take no coal.

Q. It may just be a difference of interpretation as to what constitutes the Brazeau district.—A. Have you got a map here?

The CHAIRMAN: Yes.

WITNESS: In the Brazeau district there are six mines including the Brazeau Collieries Limited mine, that is bituminous; Saunders Creek; Saunders Alberta; The Alexo and the Harlock. These mines are all outside the bituminous district. They can be used for steam, but they are not bituminous.

Q. There are other mines in the Brazeau district, but they are not steam coal producing mines.—A. The Saunders Creek Colliery does not produce at all, has not been producing for nearly a year. For instance here (pointing to a map) is Edmonton. Here is this line into Nordegg. This red line here is the branch of the Canadian National Railway from which they get their coal. Probably the gentleman is referring to coal out of this district here, on the Grand Trunk Pacific, which is further north still.

Q. I have only reference to what people speak of as the Brazeau district. I was surprised at your statement that there was only one mine in that district.—A. One bituminous. Of course there are more bituminous districts in Alberta than the Crows Nest and the Brazeau. You have the district along the main line of the old Grand Trunk Pacific which is producing bituminous coal also.

By Mr. Maharg:

Q. Have you any knowledge of the selling price of that coal before the war, and since, Mr. Dougall?—A. Yes, in a general way. At that time I was interested in some mines myself, and was actively engaged in selling coal. But to what particular kind of coal do you refer, sir?

Q. I was a little more interested in coal for domestic use, but it would apply to other coal as well.—A. Well, I will take the two larger districts in the province, that is Drumheller and Lethbridge.

Q. Those the the two sources—A.—Yes, and there is Edmonton, too. There are three lignite districts. In 1914, as near as I can remember, the price of lump coal at the mines of Drumheller, ranged from two dollars and fifty cents to three dollars—for lump coal. The selling price at the present time is six dollars and sixty-eight cents at the mines.

Q. Six dollars and sixty-eight cents?—A. Yes.

Q. That is Drumheller?—A. That does not, of course, apply to the price of screen grades, such as nut and egg and slack. Slack was being sold, I think, as low as twenty-five cents a ton. I do not know what it is selling for to-day. The nut coal is anywhere from one dollar and twenty-five cents to one dollar and seventy-five cents, depending entirely on the grade. Sometimes if the market is good, your price is higher, but if your market is flat, your price is lower, because you have to get rid of that product; you cannot hold it.

Lethbridge: The price at Lethbridge was around three dollars and seventy-five cents in 1914. It is seven dollars and twenty cents to-day, f.o.b., lump coal at the mines.

[Mr. J. Dougall.]

By Mr. Cowan:

Q. What is the chief reason for the price there, do you know?—A. Yes, the increase is due to the increase in the cost of operation.

Q. Which includes what?—A. Wages and material.

Q. Chiefly wages, I presume?—A. Largely, because wages enter largely into the production of coal.

Q. As a matter of fact, the geographical nature—or rather, the nature of the deposits there would make it just as cheap to mine coal to-day as it was five or six years ago?—A. Yes, the geological conditions, yes, but as the mine gets older, of course, the upkeep is a little heavier.

By Mr. Chisholm:

Q. What percentage of that coal is steam coal?—A. We are still dealing, as I understand it, with domestic coal, sir. Do not let us get these things tangled up. We will take the steam coal later on. Well, it is all screened. I may say, in round figures, it is all screened.

Q. You spoke there of lump coal selling at seven dollars, or something like that.—A. Seven dollars and twenty cents in one district, and six dollars and sixty-eight cents in the other.

Q. What percentage of the coal as it comes from nature would you regard as lump coal?—A. You mean what percentage of lump does the mine produce before screening?

Q. No, I am from Nova Scotia, and do not understand these western conditions fully. I want to know what percentage of a ton of coal as brought out of the mines is lump coal?—A. That is what I mean. You want to know the percentage of lump per ton of mined coal?

Q. Yes.—A. It all depends on the districts. In some of the districts you get seventy per cent of lump. There are no two mines alike. Some will produce fifty per cent or sixty per cent, or seventy-five per cent. In the Drumheller district there are lots of those mines which will produce sixty-five per cent lump.

By the Chairman:

Q. You spoke of nut coal in referring to the Drumheller mines?—A. Yes.

Q. What do you mean by "nut coal"? A. Well, the coal is put over a metal screen. There is no fixed size in the Alberta fields, for instance, one mine may be screening over a two-inch round hole, and another fellow at an inch and a half, and another fellow at three inches, and so on, and they simply put the coal over the screen and the smaller pieces fall through and are separated.

Q. Are you familiar with the term "nut coal," as applied to anthracite?—A. Well, the size of the coal out there is approximately the same size as the coal you get here. In the States, there is a fixed size for coal, but out there it has not been made definite as yet.

Q. But as regards the quality—there would not be any comparison because here you are using anthracite exclusively, whereas there you are dealing with the lignite coal.

Q. So that the term "nut coal" applies only to size?—A. Only to size, yes.

Q. I am not clear, Mr. Dougall, on one thing. I am speaking of the mines in the northern part of Alberta, the Canadian National Railways get their supply entirely from the Brazeau mines—A. I did not say "entirely", I said "largely".

Q. Well, we will change that to "largely". Are there other steam coal mines along the line of the Canadian National railway?—A. No,—Yes, now there are. There are on the Grand Trunk Pacific.

Q. On the line of the Canadian National—the old Canadian Northern?—A. There is one mine there—the Brulé Lake collieries,—I think it is the Brulé Lake;

[Mr. J. Dougall.]

I have forgotten just what it is called—yes, they are known as the Brulé Lake mines anyway.

Q. They produce steam coal there?—A. Yes.

Q. Is that adjacent to the Canadian National railways?—A. Yes.

Q. Tapped by it?—A. Yes.

Q. Are there any others?—A. On the Canadian Northern itself?

Q. We have been led to believe, and we do believe, I think, that there are immense quantities of coal all through that district.—A. Yes, sir, there are.

Q. I wanted to get their position relatively,—their relative positions to the railway lines.—A. Yes.

Q. If you can tell us, Mr. Dougall; pointing it out on the map, does not assist the reporter. Just describe them as you point them out.—A. Yes. This branch line here—

Q. Describe it, so the reporter can get it specifically.—A. It goes through from Pickerdike to Mountain Park about fifty five miles, and from Cold Spur to Mountain Park is all bituminous coal. There is another branch of that railway from Cold Spur to Lovett, with sub-bituminous coal. The railways do not consider that as first class steam coal for railway purposes. The coal on the inside, from Cold Spur to Mountain Park is good bituminous steam coal that can be used by the railways, and is used by the Canadian National Railway, and by the McArthur roads who are operating in the north and by the Alberta Government railway operating in the Lac la Biche district.

There are also large deposits of coal still further in the mountains south of Mountain Park, and there are coal areas along the eastern area of the Rocky Mountain Break, all the way south to the United States border. Your question was as to quantities? Well, that has not been touched.

Q. I quite appreciate that, but the point I wish to bring out is as to the availability of other coal fields, to the Canadian National railways, for instance, the Brazeau district.—A. Yes, sir, that is the district I have just described.

Q. And why the Canadian National railway should be buying their coal largely from the Brazeau mines, if other mines were producing coal?—A. According to your statement, I would infer there are.

Q. I mean any mines along the Canadian National which are not producing a good quality of coal.—A. No, sir, I did not intend to imply that, because that would be untrue. I said the best coal produced in Northern Alberta came from the branches which I have just described, that is coal between Cold Spur and Mountain Park.

Q. How far is that from Edmonton?—A. I do not know—it is about one hundred and twenty five miles, west. I do not know exactly.

Mr. HUDSON: It is two stations west of Edson, the divisional point. Bickerdyke is two stations beyond Edmonton.

By the Chairman:

Q. What is the approximate output of those mines?—A. Last year this mine produced two hundred and forty tons—that is for both of them; there were two of them operating.

Q. Do you know their capacity?—A. Well, of course, I cannot tell you at the moment, but one of these mines is at present on fire and was last year, and it is not producing now, although they are re-opening it.

Q. Two hundred and forty thousand tons, would not be a very large percentage of the supply required by the Canadian National railway in the west?—A. No, but as I told you, they are getting coal from Brulé Lake and also from the Pocohontas mine, as well. They are on the Grand Trunk Pacific.

[Mr. J. Dougall.]

Q. Where is the Pocohontas mine?—A. They are on that piece of line torn up during the war.

Q. Between Edmonton—A. And the top of the range. They are in the National Park.

By Mr. McKenzie:

Q. I suppose you are familiar with the names of the large coal companies in British Columbia, Alberta and Saskatchewan?—A. Yes, in a general way.

Q. I would not bother you about the smaller ones, but the names of the principal companies. To begin with British Columbia?—A. Starting from where, sir?

Q. Take British Columbia first, and then Alberta.—A. On the Island?

Q. No, the whole province.—A. Oh, of the whole province? Oh gracious! Well, the Canadian Collieries Ltd., at Dunster, on Vancouver Island. There is the Wellington Coal Company at Nanaimo, the Pacific Coast Collieries. Those are the three largest ones, and then there is a new property there developed lately by the Grandy Consolidated Mine and Smelting Co., at Cassidy.

Q. Now, take Alberta.—A. Yes. There is the Coleman Coal Company Ltd., at Coleman.

Q. What is the name?—A. The Coleman Coal Co. I am not sure, but I think that is the approximate name of the company. It is owned by Mr. Wilson at Vancouver.

By Mr. Blair:

Q. Where is that located?—A. At Coleman.

Q. What part of British Columbia?—A. In Central British Columbia, about twelve miles from Princeton, on the Kettle Valley railway. Then there are some mines at Meritt, the Meritt Coal Company. That is a Vancouver concern. That is all until you come to the Crow's Nest Coal Company at Fernie. I should say Fernie and Michel. Then there is the Corbin Coal Co., at Corbin. That is about the lot in British Columbia.

By Mr. McKenzie:

Q. Now, give us Alberta.—A. Well, on the Crow's Nest line of the Canadian Pacific, in the bituminous area, starting from the west, you have the Carbondale Coal Company.

Q. The which?—A. The Carbondale Coal Company. Then the International Coal and Coke Company at Coleman; the West Canadian Collieries at Blairmore, the Canadian-American Coal and Coke Company, at Frank—not operating at the present time; the West Canadian Collieries at Bellevue; the Hillcrest Collieries, Ltd., at Hillcrest; the Leach Collieries at Passburg—not operating—the Davenport Coal Company at Bermis—not operating. That is all the mines in the bituminous area, on the Crow's Nest line of the Canadian Pacific railway.

At Lethbridge in the lignite district—let us see, what do they call themselves?—at Kipp, you have the North American Collieries. This is travelling east, sir. At Lethbridge, you have the Canadian Pacific Railway operating what is known as the Galt mines, and a number of smaller ones—about ten or twelve. We had better take the Tabor district next. That is twenty miles east of Lethbridge, and there you have the Canadian West Coal and Coke Company, and ten or twelve smaller operations as well. At Medicine Hat you have a couple of small country banks.

By Mr. Cowan:

Q. Is there much mined there at Medicine Hat?—A. Not very much.

Q. Is it good coal?—A. It is lignite; not as good as Lethbridge.

[Mr. J. Dougall.]

Q. The same class?—A. The same class, but not nearly as good in quality, or moisture. Then we go north to the main line of the Canadian Pacific, starting from the west, and you have the Bankhead Collieries, a property on the Canadian Pacific Railway, producing an anthracite coal sold only for domestic purposes. Some of the slack is made into briquettes mixed with steam bituminous coal which is used on the road, and the mines at—what do they call themselves?—the Canmore Coal Company, at Canmore, those are the mines that operate on the main line of the Canadian Pacific Railway. The next district is the Drumheller district north and east of Calgary, eighty-three miles, in which there are probably twenty collieries operating. I do not know without counting them, but there are approximately twenty—let me see; twenty-eight I think. In that district is the Rosedale Coal Company, which is probably the largest and best equipped; the Monarch Colliery, which is a branch of Mr. Lovett's concern, the North American Collieries; the A. B. C. and the Newcastle which are both controlled by the same man, Mr. Jesse Gouges.

By Mr. Maharg:

Q. The A. B. C. is the Alberta Block?—A. Yes.

Q. We have an A. B. C. in Toronto. You might get them mixed.—A. Oh, I see, they are both together. And then there is another one there of fairly good size, the Midland Coal Company. The Drumheller Coal Company and the Rosedale—those are about the biggest. I think there are a number of smaller ones and they are all producing. You see, the largest production in that district was from the Rosedale, one hundred and twenty-two thousand last year. The Rosedeer—I did not give you that one; that is up on the creek—one hundred and one thousand; the Alberta Block—that is the A. B. C. of Gouges—one hundred and twenty-eight thousand, and the North American Collieries, that is the Monette Collieries, one hundred and twenty-six thousand.

By Mr. McKenzie:

Q. Without troubling you any further about details, would you kindly name the four largest coal producers in Alberta?—A. Without referring to the quality of the coal, sir?

Q. I mean merchantable coal?—A. One is steam and the other bituminous. We divide them absolutely out there.

Q. Do you put them in different classes, as you take it out of the mines?—A. Yes, one is bituminous and the other is not.

Q. Do you get both kinds out of the same mine?—A. No, not as a rule. We do to a small extent.

Q. Regardless of what they produce, I would like the name of the four largest companies.—A. The largest producing coal company in Alberta—

Q. I only want four.—A. All right. The largest producing coal company in Alberta is the West Canadian Collieries, Limited. They would all be in the same class, they would all be in that class, No. 1. Put the Brazeau collieries second, and the Galt mines third, that would be about the way it would run, I guess. You want the fourth, eh?

Q. Yes. Just so we won't be too close in our comparison later on.—A. You have the McGillivray mine and the Hillcrest in there, each with a hundred and twenty-one thousand tons.

Q. Those are the four larger ones?—A. Yes, that is all steam coal. These are the largest producers. No. there is one which is not—at Lethbridge.

Q. Are there any coal mines of considerable production in Saskatchewan?—A. Yes, at Bienfait, Estevan and Souris.

Q. Two?—A. Three. It is all in the one district—lignite coal; not steam coal.

[Mr. J. Dougan.]

By Mr. Cowan:

Q. When you use the name "Souris," is that the name of the company?—A. No, there is the Souris Coal Company.

Q. But Souris is in Manitoba?—A. Yes, but it is just across the line, Doctor, as you know.

Q. That is what made me ask one witness if there was any mining done in Manitoba, and the witness said "no," and I was under the impression that there was one at Souris.—A. Yes.

Q. It is all lignite coal?—A. Yes.

By Mr. McKenzie:

Q. Do you know a concern called the "Munson Oliphant Coal Co."?—A. yes.

Q. Where are they?—A. They are on this branch south of the Canadian Pacific railway, which I mentioned before. It is sub-bituminous coal; it is not straight bituminous coal; it is non-coking.

Q. They have to go underground to get that coal?—A. No, sir, a lot of their coal is right on the surface.

By Mr. Blair:

Q. What is their output?—A. The Oliphant Munson—what was your question?

By Mr. McKenzie:

Q. Mr. Blair asked what the production was.—A. Two hundred and twenty-four thousand tons for 1920.

By Mr. Maharg:

Q. What quality is that, Mr. Dougall? Is it steam coal?—A. It is semi-steam coal. It is not considered good coal for locomotive use, not as good as the bituminous coal of the inner district, or as good as the Crow's Nest coal, or the Brazeau coal for the class of work which the railways perform, the sub-bituminous coal of Oliphant-Munson is not classed by the Mines Branch or the geologists as straight bituminous coal.

Q. Would there be much difference in the price the railroad would want to pay for it?—A. Yes.

By Mr. Cowan:

Q. It is pretty cheaply mined coal?—A. Yes, more cheaply mined than any other coal.

Q. For what does it sell at the mine?—A. I cannot tell you, Doctor. I do not know at the moment. I really do not know.

By the Chairman:

Q. What is the output of that mine used for?—A. It goes largely for domestic use and for stationary steam plants.

By Mr. Cowan:

Q. It is pretty good coal for stationary steam plants?—A. Yes.

By Mr. Blair:

Q. Do you know the Alix district? And the Castor district?—A. Yes.

Q. What is their position?—A. It is a low-grade lignite coal, it would not keep; it weathers, goes to pieces. You could not store it. It is all right for immediate use, and if it can be mined cheap enough—some of it can and some of it cannot.

[Mr. J. Dougall.]

By Mr. Maharg:

Q. That coal is very cheaply mined?—A. Which?

Q. The Oliphant?—A. Some of it is a steam shovel proposition—stripping it.

Q. It is away up?—A. It is on the side of the mountain.

Q. And mined by gravity operations, as it were?—A. Yes, but the stripping proposition—the coal is near the surface of the ground and has a small covering of rubbish and rocks. They take these off, and mine it with a steam shovel, and that is what they are attempting to do.

Q. Is that on the railway?—A. Yes.

Q. Who owns it?—A. The Oliphant-Munson Coal Company.

By Mr. Cowan:

Q. You mentioned two in the Crow's Nest Pass that are not operating. Do you know why they have ceased operations?—A. That is a pretty hard question to answer. They ceased operations because the quality and the conditions of the areas insofar as prospected did not warrant the owners in operating. I operated one of them myself for two years, but the quality of the coal—there was twenty-seven per cent ash and it was wanting. There are thin places where it is not worth while to operate the collieries, that is the reason. The reason that the Frank Company is not operating—you will remember a year ago the mountain fell over the top of the mine; I opened that mine myself, and was within three hundred feet of the accident, and the company never got on its feet again—it is a French company.

MR. COWAN: That is easily understood.

WITNESS: They never got on their feet again after that disaster.

By Mr. Cowan:

Q. Do you know how this steam coal compares as to quality with American steam coal?—A. Yes, the Crow's Nest Pass coal as mined at Fernie is as good as anything produced in the United States.

Q. How does it compare in cost of mining?—A. It is pretty expensive stuff to get on account of the gas. That is, the Fernie district. On the eastern district, between Coleman and Hillcrest, the areas are not so gaseous and the cost is not so high.

Q. You spoke a while ago of the steam shovel proposition?—A. Yes, that is a different proposition.

Q. But I mean for supply—for instance the Alberta Government has recently launched out a very aggressive policy to develop the industries in the province, and naturally steam coal forms the basis of industry to a large extent. Will Alberta be able to compete with other places in that if they get a steam coal which will enable Alberta to build up an industry there?—A. Oh my, yes. For instance, we sell the slack, the fine coal with the dust removed, even from the lignites for steam purposes, and it is sold as low as 25 cents a ton. As far as stationary boilers are concerned, any of that coal can be used to make steam in stationary boilers.

By Mr. Cowan:

Q. You think that Alberta has got all it requires in the way of cheap fuel?—A. Even the coal from Souris in Manitoba which has 24 per cent moisture is being used in your mill, Mr. Maharg, for steam, and has been for years.

Q. We have to carry on a very aggressive campaign to get capitalists to know what we have got there, and I want to get that in print.—A. So far as coal for stationary boilers is concerned—

Q. We have the world beaten.—A. You have any amount of it. The country is practically covered throughout with coal that can all be used for stationary steam. It is just a matter of boiler capacity to put it into use. For instance,

[Mr. J. Dougall.]

we will take the power plant at Saskatoon belonging to the city; the power plant belonging to the city of Regina—they have burned fine coal about pea size for the production of electricity for a number of years taken from the Drumheller district largely.

Q. There are about 30,000 tons a year there.—A. At Regina you use in the plant bituminous slack from the Crow's Nest Pass, some from the Drumheller district, and you use some coal there from the smaller mines in the Brazeau district outside the Brazeau mines, such as Saunders Creek in that boiler plant.

By Mr. McKenzie:

Q. I was going to ask you something about your statement in respect to the percentage of lump coal that we get out of the mines. I understand that you are a practical miner yourself.—A. Yes, sir, I am not a mining engineer.

Q. Would not the percentage of lump coal or round coal, as we call it sometimes, depend upon your system of mining to a great extent?—A. Not out there. I want to subtract the steam coal mines from the domestic coal mines. We have a peculiar situation out there

Q. I want you to talk particularly about the mines out of which you get this lump coal.—A. Not altogether. For instance in the Lethbridge district you have a clay top which works pretty bad, and you must keep your mines in operation all the time or your coal breaks up more. There are the natural conditions in those mines out there. For instance, the mine belonging to Sir William Mackenzie and his associates at Drumheller, the Rosedale Collieries, they get part of their coal as lump by nature. It is very hard and does not break. It is easy to mine. A man can go in there and shoot his head off, and it will come off. Take the Monarch, Mr. Lovett's mine, you have to use considerable care. I opened that mine myself. You have to use considerable care or the coal will shatter.

Q. I understood you to say that this coal is on the surface, the coal you spoke of.—A. The shaft I spoke of at the Monarch, Drumheller, is 160 feet. The seam they are working is not so deep. It is practically on the surface, the steam seam at Rosedale. There are nine miles between them.

Q. How do they work the coal mines where you have like what we have in Nova Scotia coal with a roof overhead and a pavement below.—A. They have all that, only some are closer to the surface than others.

Q. In mining coal like down under the ground, where you have a roof over the coal and a pavement under it and you take out the coal from in between, the percentage of lump coal that you get out of that would depend largely on the quantity of explosives that you use in mining the coal.—A. Oh, yes, if you shoot your coal, you shatter it to pieces; or if you try to shoot it in the tight, you have to give it a chance to move or it will break. We use machines of various kinds, punchers and chain machines. There is very little pick mining now, practically none.

By Mr. Douglas:

Q. Do you use any radial machines?—A. Yes, we do. There are some working there, not very many of them. There are two or three using the Scotch machines.

Q. You use a good many punchers?—A. The radial you spoke of is a puncher. It was a Sheffield invention originally.

Q. What is commonly called the puncher?—A. It is an ordinary little machine, sitting down, that you work with your hands that we used to use in the old days catching nigger-heads. We have the chain machines, that is an electric machine. We use them of various kinds, some of them chain machines. The old pick days are gone.

Q. The hand pick days are gone?—A. Oh, yes, it was too costly. You cannot get the coal quick enough.

[Mr. J. Dougall.]

Q. What kind of explosives do you use?—A. Ammonia powders now. Dynamites have gone out.

Q. Do you use the Monobel?—A. Yes, that is the Monobel.

Q. Do you use Viking?—A. I do not know that we do. But the Monobel is largely used out there.

By Mr. Maharg:

Q. A controller has been more or less in control of the mines out there for the last few years.—A. Yes, since the war.

Q. Under a commission. What do you know about that?—A. Well, during the war the Government decided that owing to certain conditions that existed out there, it was necessary to operate the mines under a commissioner appointed by the Minister of Labour, or at least working under his jurisdiction, and Mr. William Armstrong was appointed for that purpose, and he has been operating those mines. At least, they have been operated under his direction from that time. I think they are still under his direction, so far as I know.

Q. Did he have practically the fixing of the price of coal and wages? You are familiar with the conditions at that time in the West.—A. Yes. Well, what happens is this: Mr. Armstrong fixes the wages that will be paid by the operators.

Q. He practically fixed those wages?—A. He does fix them, and he then authorizes—firstly the men approach him for an increase in wages due to the increase in the cost of living. Mr. Armstrong has a board consisting of one Government official, a miner, and a representative of the operators. They sit persistently and report every 90 days as to the increased cost of living. If they report an increased cost, Mr. Armstrong figures out what that shall be, and he orders the colliery companies to pay it, and authorizes an increase in the price of coal consistent with that increase. In that way, he naturally controls the selling price.

By Mr. McKenzie:

Q. Which province is that?—A. District 18 only.

Q. Is that in Alberta?—A. Yes, sir. It takes in southeastern British Columbia and more or less the whole province of Alberta, with the exception of some of the smaller mines.

By Mr. Cowan:

Q. That control may have been absolutely necessary during the war?—A. Yes, sir.

Q. It may also have been beneficial; I do not want to discuss that at all. But it still continues under Mr. Armstrong?—A. I cannot say. I think so; but I do not know positively.

Q. What would be your opinion, do you think it should not be continued, or would you consider that it should be thrown open again to open competition?—A. Personally, I would consider that there should be no control if we want to get prices down. It has been stated that it should be continued for one year longer for the benefit of the operators and miners both.—A. Yes.

By the Chairman:

Q. Why do you think that there should be no control?—A. As a coal salesman I like competition. I am not particularly anxious for control of any product. I do not think it is healthy.

Q. Does this control interfere with competition?—A. In a general way, naturally it does.

Q. In what way?—A. It naturally interferes with the competition of the miners. They more or less become—you might say a trust if you will.

[Mr. J. Dougall.]

Q. How do you mean interfering with the miners?—A. There is no incentive to get out and sell, and from the consumers' standpoint we have to look into this phase of the thing. That is where I come in as an agricultural representative. The farmers' products are live stock, hogs, cattle and sheep, and their prices are all shot to pieces. The price of grain is going the same way, and yet these farmers have got to buy their coal at the war price. They must have coal.

Q. We are anxious to get just how that can be remedied. In what way does this commissioner interfere with the drop in the price?—A. He does not interfere with it except that the wages will not recede unless he orders them to.

By Mr. Cowan:

Q. Is it the understanding that the controller will order a lowering of wages as the cost of living drops?—A. Not that I know of.

Q. Evidently it was the understanding that it would increase the price of coal. As a matter of fact, we know that it did increase the price of the contracts with the Government.—A. I see.

By the Chairman:

Q. Do I understand you to say that wages should be reduced before the prices come down?—A. Wages and material, yes sir. Material has largely depreciated in value.

By Mr. Cowan:

Q. Have you any idea as to whether the coal operators in Alberta are charging an excessive profit? Do you know what they are making?—A. No, I cannot say.

By Mr. Chisholm:

Q. If you remove the fuel controller, would there be any danger of an understanding between the big operators?—A. None whatever. At the present time, some of the mines belonging to the Western Coal Operators' Association, some of the largest producers of steam coal do not belong to that organization.

By the Chairman:

Q. In order that the consumers get coal, it is necessary that the coal be produced, is it not?—A. Yes.

Q. That goes without saying.—A. Absolutely.

Q. We had evidence before this committee to the effect that the coal mines of that district were kept in operation largely through the efforts of Mr. Armstrong, the commissioner.—A. I think that is quite right.

Q. Now, the question is, what in your judgment, might be the advantage if Mr. Armstrong's office was done away with?—A. Well, naturally—

Q. What would be the action of the miners?—A. Well, I suppose eventually there would be some trouble.

By Mr. Cowan:

Q. Some trouble?—A. I would not be surprised.

By the Chairman:

Q. Trouble in what way—strikes?—A. Yes.

Q. Where would the coal come from then? How would that affect the production?—A. Where it always came from. There have been lots of production before.

Q. How will that affect the production of coal?—A. It would affect it to some extent, but not altogether, because there will always be some of the mines producing.

[Mr. J. Dougall.]

By Mr. Cowan:

Q. In other words, the union does not reach all of the mines, you mean?—A. Yes, for instance, in 1919,—mind you, I am not suggesting a strike, because goodness knows it is the worst thing in the world—

The CHAIRMAN: We are concerned in this committee in the interests of the western consumers to avoid—

WITNESS: Of course—

The CHAIRMAN: Just wait a minute. We are concerned in the interests of the western coal consumers in the avoidance of strikes and the increased production of coal.—A. Yes.

Q. Then to ascertain what the situation might be, in your judgment, if the control of this commissioner was removed. I am not arguing that it should, or it should not be.—A. Nothing—

Mr. McKENZIE: Just a minute, before answering that. I am not quite clear that it is fair for this witness to be asked to answer that question.

WITNESS: I would rather not. It was a political question.

The CHAIRMAN: No, it is not a political question at all.

Mr. McKENZIE: If I were the witness, I believe I would not care to make a prophesy of that kind. It is not helping any.

The CHAIRMAN: I might explain my position. The witness has answered several questions relating to the work of the commissioner and I thought it was only fair to follow that up to ascertain what the situation might be if the commissioner were dispensed with.

Mr. McKENZIE: It is wonderful how readily people may be influenced by opinions. A man may give an opinion and a whole community may be influenced by the answer which he gave.

WITNESS: That is quite true, sir, especially under these conditions.

By Mr. McKenzie:

Q. Of course, if you choose to answer, it is all right.—A. I presume I must answer if the question is asked.

Q. You are not bound to answer unless the question is fair.

By the Chairman:

Q. I do not wish to press the question, so I will substitute another. While the commissioner has been exercising his powers out there, in your opinion, it has had a beneficial effect on the production of coal?—A. I think it was necessary during the war, yes.

The CHAIRMAN: That will be sufficient.

By Mr. Douglas (Cape Breton):

Q. You spoke of some mines which MacKenzie and Mann owned out west?—A. No, Sir William MacKenzie and Mr. Roderick MacKenzie.

Q. What mines are those?—A. I said, they did own them at one time; they opened them. I do not know who owns them now. That is the Brazeau. It was the property of Sir William MacKenzie, and Mr. Norbeck, and the Brule Lake Colliery which was the property of a company controlled by Mr. Roderick MacKenzie. They may have changed hands now; I do not know.

By Mr. Maharg:

Q. Who is Roderick MacKenzie?—A. The son of Sir William.

By Mr. McKenzie:

Q. You say, Mr. Dougall, the farmers are to a very large extent the consumers of this coal?—A. Of the domestic coal.

Q. What effect would the reduction of freight rates have upon the supply of coal for the farmers?—A. It might have some, but not to any large extent. I do not know very much about freight rates, but I understand the increase was a per ton increase and not an ad valorem increase. I am not sure of that. I do not know very much about freight rates.

Q. They spoke about an increase of thirty-five per cent in freight rates.—A. That did not apply on coal, did it?

Q. I understand that it applied on everything the road was hauling.—A. I understood not. I thought it was a certain amount on coal.

By Mr. Douglas (Cape Breton):

Q. I think it was a per ton increase.—A. I think so,—I do not know what was.

By Mr. McKenzie:

Q. Whatever it was, it was in the nature of a charge for hauling?—A. Yes, but that does not affect the price of coal at the mine.

Q. But it does delivered at the farmer's house or wherever he wants it?—A. Yes.

Q. Would not the extra charge, by a general rise in rates, affect coal—an extra per ton charge? Would that not naturally increase the cost to the farmers?—A. Usually the farmer pays.

Q. To all intents, if that were taken off, it would make it easier to get coal?—A. Yes, provided the dealers gave the consumers the benefit of their reduction in freight rates, which does not always occur.

Q. By the way, did you not mention yourself as a coal salesman?—A. Yes.

Q. Are you a coal salesman now?—A. No.

Q. You are not representing any coal mines now, are you?—A. No.

By Mr. Maharg:

Q. Have you any recollection of the miners' making any request for an increase in wages, which was refused to them?—A. No, I have not. They may have done so. I suppose probably they made very many requests which were refused, but—

Q. But the general trend all the way through was for an increase?—A. Yes. As explained, Mr. Maharg, the matter was practically in the hands of this Investigative Board which sat continuously and reported every ninety days, and the increase was retroactive.

Q. But the board was a representative of the miners, a representative of the operators, and the commissioner himself?—A. Well, not exactly. The commissioner was represented by some other man. He did not sit himself. I think one of the employees of the Department of Labour was on the board.

Q. There would not be very much of a scrap between the operators and the miners, if the mine owners knew they would be allowed an increase in coal if there was an increase in wages—there would be very little opposition from their viewpoint.—A. It would all depend on the foresight of the mine operators—what they thought of the future—of their possibilities.

By the Chairman:

Q. As a matter of fact, the miners have, under the law, the privilege of asking for an increase in wages any time, and if it is refused, of asking for a Conciliatory Board?—A. Under the Lemieux Act?

Q. Yes.—A. Yes.

[Mr. J. Dougall.]

Q. Under this arrangement—and you will correct me if I am wrong—it was very largely a substitution for the action of the Labour Department?—A. Yes.

Q. It was on the ground, and it would act promptly and quickly on any application of the miners?—A. Yes.

Q. That was the real purpose of the commissioner and the board?—A. Yes.

Q. By their action, the mines were kept in operation throughout the war?—A. Yes.

Q. It was an essential of the country?—A. Absolutely.

By Mr. McKenzie:

Q. Do you come from Alberta, Mr. McDougall?—A. Yes, sir.

Q. We had the Provincial Secretary of Alberta here, testifying before this committee, and two other gentlemen, I think Mr. Pitcher and Mr. Young.—A. Mr. Côté is the Minister of Mines, and Mr. Pitcher represents the Alberta University, and Mr. Young the secretary of the Western Coal Operators' Association.

Q. You will regard those men as being here representing those large coal interests of Alberta, would you not?—A. Well, Mr. Young is the only man who represents any large body. He represents a proportion of the operators in the province. He does not represent them all. They are not all members of the Western Canadian Operators' Association.

Q. Which mines would you say Mr. Young was representing?—A. He represents principally the steam coal interests, but not all of them.

Q. Give the names of three or four big companies he would represent?—A. The Crow's Nest Company in British Columbia, the International Coal and Coke Company in Alberta, the Carbondale Coal Company, and the Bankhead Collieries, the Franco-Canadian at Frank, the Canmore Coal Co., at Canmore. That is about all.

Q. How many of those would be in Alberta?—A. All but one, the Crow's Nest Coal Company. Well, two mines, but one company.

By Mr. Douglas (Cape Breton):

Q. I thought Mr. Young said he represented about fifty-five per cent of the output of that district?—A. I think that is about right. He represents some of the ignite mines in the Drumheller district, and some in the Lethbridge district, and some of the mines in the bituminous district.

By Mr. Maharg:

Q. Under the present arrangement, Mr. Dougall, there is practically no competition whatever?—A. Not very much.

Q. There is no necessity for it?—A. Not a great deal.

Q. Except as to quality?—A. Except as to quality.

Q. Not much as to price?—A. Not much as to price.

Mr. COWAN: You mean by reason of not having the controller in?

Mr. MAHARG: Yes.

Mr. COWAN: That is the point which appeals to me. There can be no competition. The operators do not need to care—

WITNESS: I am only giving you my personal opinion.

Mr. COWAN: The situation seemingly is this, that the miners make a demand for an increase in wages. This is concurred in by the controller. He gives the order, and they immediately authorize an increase in the price of coal to that amount, and also authorize the breaking of any contract which may have been made—

WITNESS: No, I would not like to say that, Dr. Cowan.

. [Mr. J. Dougall.]

Mr. COWAN: I know that, because when I was Mayor of Regina, we had a contract, and they raised it twenty-five cents—

WITNESS: Yes, but they did not break your contract. The Commissioner authorized an increase on that contract, and you could have refused to pay it, or broken your contract yourself.

By Mr. Cowan:

Q. Yes, but that would mean that we would have had to go to another company which had the same authority.—A. The only thing is I would not like to say that they broke a contract because I am not clear whether they did or not.

Q. I would not accuse the company, but that is what it amounted to.—A. Well, probably that was it.

Q. So there was no competition at all?—A. Not very much.

Q. The controller makes the consumer pay whatever the miners demand?—A. That is practically it.

By Mr. Maharg:

Q. I will put this case to you? Supposing we took over the administration of those duties, and that one colliery was producing coal at three dollars, and another producing coal at, say, four dollars. Now, the cost of living goes up; would there not be the same differential?—A. No, there should be, but there is not in fact.

Q. That is the fact, is it?—A. It is practically so. In the larger districts, yes, but of course in the little country bank districts, that does not apply.

Q. So you say that as to those—the fifty-five per cent of the operators in Alberta and British Columbia represented by this association—that the prices are uniform?—A. Pretty muchly.

Q. Uniform at the bank head?—A. Pretty muchly, some of them have reduced their prices in the last few months.

Q. All of their own accord?—A. Yes.

Q. Having regard to Mr. Armstrong.—A. Yes.

Q. And this Board?—A. Yes. One of them, I think, is the Newcastle. I saw in the press the other day where Mr. Gouges had reduced his price.

Q. You are only speaking of what you saw in the paper?—A. Yes.

Q. You would not venture to state definitely what has been done?—A. No.

By the Chairman:

Q. After the coal is produced, Mr. Dougall, a market must be found for it?—A. Yes.

Q. Is there no competition in finding a market?—A. There has not been in the last couple of years?

Q. Why not?—A. Because the market practically took care of all the coal that was produced. I might say that at the present time, all the mines are only running one or two days a week. Like everything else, the bottom has fallen out of it.

Q. That was the usual thing at this time of the year?—A. It has not been for the last couple of years. For three years, practically all those lignite mines, are very often idle from March until the middle of June; that is, the domestic mines.

Q. Now, the suggestion was made here that a differential be granted so as to induce people to lay in a stock of coal early in the season to keep the mines running. What would your opinion be as regards the farmers? Would they, in your opinion, be likely to take advantage of anything of that kind?—A. They are doing it now, and always have in the domestic markets. For instance, take an organized farmer company who have sheds throughout the west. They make contracts which more or less give

[Mr. J. Dougall.]

them a swing on the summer business. They get a little better price on the stock coal, but the trouble I may say, is the lignite which has a high percentage of moisture and will not store.

Q. Yes, but there are lots of it which will.—A. Yes, the Galt and the Drumheller, and the lignite of Edmonton, the Mix, of which Mr. Blair spoke, a lot of these other coals—the Three Hills, etc.—they would not store no matter what price you sold them at. They would go to nothing in your cellar.

Q. But those which do store will be an advantage?—A. That has always been so.

Q. To a very, very limited extent?—A. Well, there has been always a differential in the Drumheller district.

Q. The suggestion was made that it should be two dollars a ton.—A. That is out of the question. You cannot give a differential of two dollars a ton on summer coal as against winter coal.

Q. The proposal was that the railway should be asked to grant a differential in rates for a certain period, the miners a certain differential, and the operators a certain amount, and the three of them together would make up this two dollars a ton.—A. Gracious, man, how much profit do you think there is in mining the coal?

Q. The idea was to keep these mines running, and by keeping them running, they could reduce the cost of mining?—A. There is not that much profit in the whole procedure.

By Mr. Douglas (Cape Breton):

Q. What would your idea of a differential be?—A. Some of the mines in 1914 were operating on less than twenty-five cents.

By Mr. Chisholm:

Q. Twenty-five cents?—A. Some of them.

By Mr. Douglas (Cape Breton):

Q. What, in your opinion, would be a fair profit?—A. It depends on the companies. Steam coal mines should have fifty cents or more.

Q. It depends upon the capitalization?—A. Yes.

Q. And the amount of watered stock?

Mr. COWAN: We have none of that in Alberta.

WITNESS: As a matter of fact, the mines in Alberta that have been capitalized and reasonably well managed have earned a fair dividend in the past.

By the Chairman:

Q. How many of them have gone out of business?—A. There have been huge mistakes made there, like everywhere else, in the coal business and every other business, not only in Canada, but all the world over.

Q. The cost of production in Alberta to-day is rather high?—A. Yes.

Q. What is the remedy for that?—the first and main remedy for that?—A. It is a reduction in the cost of production, as I mentioned before.

Q. In what item?—A. Wages and material.

Q. You say materials have come down considerably?—A. To some extent.

Q. Wages have not come down?—A. No.

Q. So the next step is the reduction of wages?—A. Yes.

By Mr. Cowan:

Q. As you have seen it, the operators are not making an excessive profit out of all their mines in Alberta?—A. That is due to lack of a market. For instance, the last

[Mr. J. Dougall.]

three months, the mines have done practically nothing. Their overhead has continued the same as any other business, and of necessity must be absorbed when the market is good, or else the mine goes out of business.

Q. Do you know what profit the retailer has in handling coal? Are they making an excessive amount out of it, that you have seen?—A. Not that I know of. Before the war, lots of them were handling steam coal on a basis of ten cents, which is a mighty low profit. Of course, they would not handle that again. Understand me: For instance, your plant at Regina, to whom I sold coal myself, the man who handled that contract got ten cents a ton.

Q. I am aware of that.—A. Yes, and the coal was handled right into the plant; this man never saw that coal, all he did was draw his commission, which was quite right.

Q. But the retailer selling to the ordinary householder—what does he get?—A. In some cases fifty cents, and in some cases a dollar. Some are handling it on a fifty cent margin.

Q. Do you consider that an excessive profit?

By the Chairman:

Q. Would that include the cost of delivery?—A. No. When you come to consider the losses that the average retail merchant has to stand, he has to have some margin of safety, and there are quite a few losses.

By Mr. Cowan:

Q. But under ordinary circumstances, you think one dollar would not be an excessive profit?—A. No—it depends—in the country I would say, yes, but not in the city, when you have to figure the taxation and overhead. Of course, you take a country dealer, where he gets a car of coal in and delivers it right out of the car, he can handle that on a very close margin, because his money is there, and he has no overhead. In the city his costs are very high, he has his rental to pay, taxes, and insurance, and there is always some loss.

By Mr. Maharg:

Q. Who weighs the coal at the mines?—A. The mining company.

Q. The mining company?—A. Yes.

Q. And the railways accept that as the basis for weigh billing?—A. For freight charges, yes.

Q. How is that weighing done?—A. How is it done?

Q. Yes.—A. Over an ordinary railway track scale.

Q. A moving train?—A. No, the cars are weighed singly at the mine. Each car as it comes away from the tipples drops down a grade and is stopped on the scales.

Q. It is connected?—A. Each car is loaded by itself, and it goes out individually. That is the practice in Alberta and British Columbia.

Q. It seems to be the experience with most coal dealers—and I have had that experience myself—that there is almost always a shortage.—A. There would be in lignite coal—in the summer time, especially.

Q. By evaporation?—A. By evaporation, drying out of the coal. You will find, Mr. Maharg, if you look into it closely, that there is no shortage in steam coal, but there is in the lignite.

By Mr. Cowan:

Q. And the retailer has to carry that loss?—A. He has, yes, or the wholesaler.

Q. Which means he must charge a higher price in the marketing of it?—A. He must make up for it. It is a natural loss in the business.

[Mr. J. Dougall.]

By Mr. Douglas (Cape Breton):

Q. They must be able to get the coal very cheaply where they do the stripping as you describe?—A. I do not know what the costs are there. There are two or three stripping propositions in Alberta. There is one at Tofield, near Edmonton. That is one of the Oliphant-Munson, which has only been started within the last year.

Q. Are they subject to the mine laws?—A. Yes. Everything is subject to the Mine Act in Alberta, and under the supervision of the Inspector of Mines in the province—any mining operations.

By Mr. Maharg:

Q. There is no supervision of the grading of the coal? That is a matter in the miners' own hands?—A. That is left entirely to the operating men—to study his own market.

Q. What would you think the supervision—A. I do not think it would make any difference, Mr. Maharg, because the coal operator makes the coal as good as he can; that is, always for what price he can get for it. If you want to buy four-inch lump coal he will sell it to you, and will regulate the price accordingly.

By the Chairman:

Q. Looking at it from the consumers' point of view, the consumer does not know what coal he is buying or what mine he is buying from?—A. Yes, he does. The average consumer does know, because he buys his coal, say, from Rosedale, or Crow's Nest, and if he gets a bad dose, he does not go back to the same place.

By Mr. Cowan:

Q. Nearly all operators have their own local agents? I believe there are thirty or forty in Regina.—A. My own opinion is from actual experience, as a coal salesman, that the consumer does know what coal he is getting and is mighty keen in his buying; because you get a bad lot into a dealer, and you mighty soon hear from the dealer about it, and he hears from his customer. That is my personal experience in the game.

By Mr. Chisholm:

Q. That coal is owned by the Federal Government?—A. No, sir. Only a certain portion of it. The mines of the steam coal in the Crow's Nest are all freehold; there is not a leased mine in the lot; the Bankhead mine and Canmore mine are also freehold; the Galt mine and those in that district are freehold, and those at Taber. The mines at Drumbheller are to some extent freehold, and some leased.

Q. What do you mean by "freehold"? I am not a lawyer. I do not understand all those terms.—A. Those mines which were bought previous to 1901, I think, sir, were all sold outright. The land was sold by the Federal Government.

Q. The Federal Government originally owned the coal?—A. Yes. Since this period, the mines have all been leased. You cannot buy any coal lands in the West now; you can only lease them for a period of twenty-one years.

Q. Where is the royalty paid?—A. Ottawa.

Q. Is there a royalty paid on that coal?—A. Yes.

Q. How much?—A. Five cents a ton.

Q. To whom?—A. To the Federal Department.

By the Chairman:

Q. On the leased areas?—A. Yes.

By Mr. Chisholm:

Q. On all the coal areas?—A. There are some who do not pay any; the old roads carried no royalty at all.

[Mr. J. Dougall.]

Q. The old roads?—A. Yes. Some of the old deeds did not carry any royalties, that is, no federal royalties. There were coal taxes in Alberta, but that is out of the question.

Q. And the mine was operated under provincial lease?—A. Yes, the royalty is subject to the inspection of the department in Ottawa. They accept the sales, you see of the companies less the amount consumed for the production of the product, always figuring that the mines are properly operated and subject to the personal inspection by their representatives.

Q. Can you give the committee any idea of the total amount of coal mined last year in Alberta?

The CHAIRMAN: We have had that in evidence about half a dozen times.

WITNESS: Six million five hundred and seventy-eight thousand tons.

By the Chairman:

Q. How much?—A. Six million five hundred and seventy-eight thousand tons.

Q. The reason I asked that question is because I understand that the royalty in some instances is a good deal less than five cents a ton.—A. It would be, because some of these mines pay no royalty, and then in this six million tons mined, there would be quite a quantity used for consumption at the collieries, on which no royalty is paid.

Q. Is that so?—A. And there are some of the mines which pay no royalties.

By Mr. Cowan:

Q. What has been the effect of this dual control? Is it injurious? I mean, would the two governments each have a certain part to play in the mining of coal?—A. No.

Q. They do not interfere with each other?—A. No. All Mr. Spinney does is investigate the colliery shipments. The actual inspection of the mines is under Mr. Stearns of the Mines Branch at Edmonton.

Q. In regard to the provincial inspection; is there a very good one?—A. It is pretty tight.

Q. No nonsense about it?—no nonsense tolerated?—A. Absolutely no.

Q. And each district has its inspector?—A. Yes. There are seven or eight in the province. The inspection is very good.

By Mr. Maharg:

Q. That is for the protection of the miners?—A. Yes.

By Mr. Chisholm:

Q. These inspectors are appointed by the Provincial Government?—A. Yes, under Mr. Côté.

By Mr. Maharg:

Q. You have heard something about this briquetting process being worked out for the handling of coal of an inferior quality?—A. At Estevan?

Q. Yes.—A. You mean the carbonizing plant?

Q. Yes.—A. Yes.

Q. What do you think about it?—A. It is questionable. It is in the experimental stage. It will all depend on the value of the by-product whether the thing is a success or not. There is no question about it, if they can carbonize the coal, and do it to compete with the hard coal from Pennsylvania—that is, in Manitoba.

By Mr. Cowan:

Q. You mean Manitoba and Saskatchewan?—A. You do not need hard coal in Saskatchewan. Because you have a short freight rate and have all sorts of lignite.

[Mr. J. Dougall.]

Q. We use it just the same.—A. You might use it, but it is all a question of production and the price you can get for your by-products, for your tar and pitch and so forth, and everything you get in your carbonizing processes, but nobody can tell what you can get for it after you get it out of the coal.

By the Chairman:

Q. That would depend on the quality?—A. In the market—I am not speaking of the coal, I am speaking of the by-product.

Q. The C.P.R. at Bankhead have briquetted it?—A. No, they do not carbonize, they simply briquette the anthracite slack.

Q. That is a different proposition.—A. They buy pits from the Semmett people, and they bring them into Alberta, and briquette the anthracite slack. They do not carbonize anything, because it is already carbonized.

The CHAIRMAN: Are there any further questions to ask the witness? If not, he is excused, Thank you Mr. Dougall, for your attendance.

Witness retired.

The CHAIRMAN: We have no other witnesses this morning. I have received a little pamphlet issued by the National Coal Association of Washington, D.C., on the transportation problem of soft coal, which outlines very briefly, and to my mind very clearly, the situation at the mines of the United States fields, and the difficulties which they are encountering and so on. It seems to me that the information is just such information as is required in order that we may have an intelligent understanding of the Ontario situation. It seems to me if the committee is agreeable that this might be inserted in the record.

Mr. COWAN: You have read it and say it is alright, why, it must be.

Mr. DOUGLAS (Cape Breton): One of the main difficulties in transportations is entirely eliminated in comparison with the States inasmuch as the freight rates did not apply to coal in Canada. The general increase did in the United States, so the situation is very much different from the standpoint of cost, at any rate.

The CHAIRMAN: It does not deal specifically with costs. It deals with things more in a general way. However, it is in the hands of the committee.

Mr. MCKENZIE: I have not read it, but I am informed it is very good.

The CHAIRMAN: It is the best thing I have seen so far on this situation, and I have read quite a great deal.

Mr. COWAN: I move that it be inserted in the record.

The CHAIRMANS. By "transportation" I do not assume that they meant merely the cost of transporting coal on the railroads. It would include the distribution of coal from the mines to the consumer.

Mr. KEEFER: It is published by the National Coal Association in Washington, District of Columbia. It is showing how the essential part of the coal is transportation. I will be glad to see this put upon the record, and may I call the attention of the committee that this is applicable to the United States where it is all a problem of rail haul from the Pennsylvania fields. The minute it strikes the boundary you strike water transportation, and we ought not to close this reference without getting some clearcut evidence on water transportation, both for that Pennsylvania coal and also for the Nova Scotia.

The CHAIRMAN: May we decide one matter at a time? I would say this ought to go upon the record, and then we can follow it up with water transportation.

Mr. CHISHOLM: I am quite satisfied, if this emanates from a proper source—if it comes from the coal producers—

The CHAIRMAN: I might suggest that the National Coal Association is an Association organized under the sanction of the Government, consisting of a representative of the Coal Operators' Association, representatives who are approved by the Government, if not appointed by them, occupying a similar relation to the fuel problem in the United States that our Railway Board in Canada bears to the railway question.

Mr. DOUGLAS (Cape Breton): The Board of Railway Commissioners?

The CHAIRMAN: Not the Board of Railway Commissioners, the Railway Board.

Mr. CHISHOLM: It has nothing to do with the actual producer of coal?

The CHAIRMAN: It has; there are representatives of the coal producers on this board.

Mr. DOUGLAS (Cape Breton): I think the suggestion that Mr. Keefer has made in regard to water transportation is a very good one. I think we should call some witnesses on the question, some representatives of shipping companies in regard to the difficulties and problems of shipping by water, both across the lake and up the St. Lawrence from Nova Scotia and elsewhere.

Mr. CHISHOLM: I think we ought to have them here.

The CHAIRMAN: They were called for last Saturday, but they were unable to come. However, let us get the matter of this pamphlet settled first.

Mr. KEEFER: I think it should go on the record.

Mr. COWAN: Put it in the record. I made a motion to that effect.

The CHAIRMAN: Very well, we will include it in the minutes.

MUST KEEP COAL MOVING TO SUPPLY NEEDS OF NATION

Sifted down, the underlying problem of the bituminous coal industry is that of railroad transportation. There is nothing vague or theoretical about it; just a practical problem of moving the coal from the mines.

If the mines have the cars as they are needed the public will have its coal.

And when there is an uninterrupted flow of coal, prices always will regulate themselves and always to the advantage of the consumer.

When the transportation systems break down, for any cause whatever and a shortage of cars exists at the mines, the whole scheme of supply is thrown out of joint, and the nation faces a coal shortage.

Aside from the transportation feature, the soft coal industry, it is true, has at times perplexing labour difficulties involving periodical tie-ups of mines. But except for an unusual walkout, such as that of the miners in the winter of 1919-1920, strikes usually are confined, at any one time, to one or two fields.

While seriously affecting the individual out-put of the mines involved, sporadic strikes do not, as a rule, curtail the aggregate yearly output of the mines as a whole, so as to threaten a nation-wide coal stringency.

So transportation looms up, beyond all else, as the outstanding problem of the industry.

What makes the situation a difficult one from the viewpoint of the railroads is the stolid fact that there is a material deficiency of cars in which to haul coal. This deficiency, as calculated by Daniel Willard, chairman of the Railway Executives' Association, last fall, runs to some 40,000 cars, with an aggregate carrying capacity of 2,000,000 tons on each haul.

In a year's time with normal running time at the mines, these 40,000 cars could handle something like 100,000,000 tons of soft coal, or about one-fifth of the entire supply of the nation.

Beyond this there is an estimated shortage of some 160,000 freight cars of other types than those built for coal. The mines, therefore, can not depend upon other than open top coal cars without the likelihood of depriving other industries of rolling stock.

With the car equipment now available, the carriers must spread the haulage of coal over the entire year, or failing that, attempt to handle the major output of the mines in the period of greatest demand—the fall and winter months.

How to keep coal moving to the public, so that the railroad systems do not become clogged when there is abnormal demand is the vexing problem that confronts the soft coal industry no less than the railroads. And in the working out of this problem the public plays an essential part.

Fairly even distribution of coal the year round in order advantageously to utilize the limited car equipment at hand is the practical way out of the difficulty.

To bring this about, foresighted co-operation is needed on the part of the consumer—the large industrial user as well as the householder—in arranging for his supply of coal in the off-season, the early spring and summer months.

"NO MARKET" EFFECT ON SOFT COAL OUTPUT

To safely see the country through its soft coal supply, as well as to meet the export demand, it is calculated that approximately 550,000,000 tons must be mined each year. The output runs higher in some years and lower in others.

Experience has shown that what is called the "line of safety" which the public as well as the producer, must keep in mind, so as to guard against any contingency of soft coal shortage, is an average production of approximately 10,500,000 to 10,750,000 tons a week. When it falls below those figures for any material period of time there invariably is the danger of a pinch later on.

During the recent congressional investigation into the industry it was brought out that the coal burned the country over during the seven fall and winter months each year is always greater than the amount of coal actually hauled by the railroads during that period. That means nothing else than that a very considerable tonnage of coal must be mined and hauled and stored in the consumers' bins during the other five months of the year if the contingency of a jam in transportation is to be avoided.

When there is a condition of "no market," that is lack of orders from the consumer, inevitably there comes a partial shut-down of mines. With the normal output of coal at once interrupted, there looks ahead the threat of transportation difficulty in the months to come.

Such a "no-market" condition has already been in evidence during the early months of 1921. Government reports show that the weekly production of the bituminous mines up to April 1 had severely dropped below the line of safety.

While the weekly soft coal output averaged 12,213,000 tons in October, 1920, when production for the year had reached its peak, it began, with November, to drop. Since that month there has been a sharp decline, week by week.

In the week ending April 2 the output had slumped to 5,750,000 tons, or approximately 5,000,000 tons below the average regarded as ordinarily safe. Not since pre-war days had there been such a low average output.

The fall in output since November is shown in the following figures giving the average weekly output, month by month.

November.. . . .	11,685,000
December.. . . .	11,429,000
January.. . . .	9,613,000
February.. . . .	7,728,000
March.. . . .	6,592,000

The marked drop in bituminous output since mid-winter has not been due to any lack of available cars; for there were actually thousands of open top cars lying idle in the railroad freight yards throughout the late winter and early spring months.

Nor was the low output due to any inability on the part of the mines to turn out the coal, for miners were at hand to work the mines. It was, in fact, due alone to the failure of consumers to order stocks ahead.

In other words it was "no-market" and nothing else. And as a result, most of the bituminous mines were running at only half capacity, while, in the month of March, according to officials of the United Mine Workers of America, 100,000 miners were idle.

On the point of the ability of the railroads to handle coal shipments, Daniel Willard, as chairman of the American Railway Executives, wrote in a letter on March 14, 1921, to former Judge John F. McGee, of Minneapolis, who during last year represented North Western coal consumers:

"There is no doubt at all in my mind that the railroads of this country are quite able to carry within a twelve months' period all the coal that can possibly be consumed in this country, or put over our tidewater docks for export, provided only the movement is somewhat uniform throughout the period, and I am just as certain that they cannot satisfactorily meet the transportation requirements in connection with the fuel programme if the shipments are concentrated too greatly within a too limited period. At the present time, as you know, coal production in the country is not much more than half of what it was last October, November, and December."

In the middle of March, 1921, Mr. Willard wrote, there were "considerably over" 100,000 open top cars, built to carry coal, lying idle.

Admittedly it may not be easy for the average consumer, once out of the winter, to think of his coal supply for the winter period to come, months away. But it is not easy, on the other hand, for the carriers to find the way to get the coal to the consumer at the time he finally may decide, late in the fall, that he wants it put in.

POTENTIAL OUTPUT OF BITUMINOUS MINES

In reality there is no natural reason for a soft coal shortage. This is simply because there is a great, natural, relatively unlimited supply of coal lying underground in the fields of the country. Assuredly there is enough, some experts have taken the trouble to figure it, to last for some 7,000 years.

The nation's stupendous coal deposits—bituminous and anthracite—run, it is estimated, from three to four trillions of tons. By far the greater proportion of this is bituminous. In a general way, the United States is said to have more than one-half of the coal of the world.

Not only is there this enormous natural supply but the capacity of the mines has been developed well beyond this point where they are able to take care of demands for coal in the United States as well as for export, provided that the coal can be shipped.

TRANSPORTATION

As to the actual capacity of the bituminous mines at present, F. G. Tyron, Statistician of the U.S. Geological Survey said, before the Senate Committee on manufacture:—

"It is very clear at least 15,000 tons a week and there is some evidence pointing to a figure of 18,000 tons a week or possibly higher. But the most that we have ever succeeded in getting out of the ground in one week's time was about 13,150,000 tons. So that even in that week the maximum performance, which represents a tremendous effort on the part of the railroads, failed to make it possible for the mines to operate full time."

In the soft coal fields there are some 10,000 mines, with approximately 7,000 operators engaged in running them. The larger mines, which produce the bulk of the soft coal consumed by the nation, have an aggregate output of from 200,000 to over 1,000,000 tons a year.

The soft coal industry, with its great number of mines, is essentially competitive in character. Any attempt to effect a monopoly, were one essayed, would simply cause the large mines to increase their output or new mines to spring up.

An idea of the opportunity for sudden development of the bituminous industry is given in Government reports showing that between 1917 and the latter part of 1920 from 3,000 to 5,000 additional mines were opened. In any emergency they spring up, mushroomlike over night. With the existing 10,000 mines working at capacity, it is estimated, more than 800,000,000 tons of soft coal could be produced each year. The highest output which the mines have been called upon to produce up to this time was 579,386,000 tons in 1918.

THE PROBLEM OF SOFT COAL

This, so far as natural supply and the ability of the operators to mine the coal are concerned, there obviously is no occasion for a shortage of soft coal.

NOT PRACTICABLE TO STORE COAL AT MINES

To appreciate how dependent is the bituminous industry upon cars for steady operation, it must be realized that it is not practicable to store soft coal at the mines.

Facilities for storage at the mines do not, as a rule, exist. The mines are usually situated in hilly country where there is literally no physical room to store the output.

Even where there is physical adaptability for storage in the vicinity of a mine, it would not be a practical thing because it would require coal to be handled twice and this would approximately double the cost of production.

So it has never been and is not now customary for coal to be stored at the mine. On the contrary the coal is shipped away as mined; and the mines are organized, equipped and operated so as to provide a continuous shipment of the output.

Consequently the operation of the mines from hour to hour is entirely dependent upon the presence of sufficient railroad cars every day into which the current output may be loaded and shipped to customers. Insufficiency of cars at the mines necessarily and inevitably causes a loss to the output of coal.

Even if it were feasible to store coal at the mines there would be no advantage to the public, unless there were cars available to haul it away in time of need. Coal at the mine, whether above the ground or underneath, obviously would be of no use to the consumer in an emergency if he had no way of getting it.

Users of bituminous coal mines in the United States are divided, approximately, as follows: Industries and public utilities, 40 to 50 per cent of the output; domestic, or household, consumers, 16 per cent; railroads, 25 per cent; export and bunker, 6 per cent; mines, for operation, etc., 3 per cent.

All users of coal, including the household as well as manufacturers and public utilities, were urged by the Bituminous Coal Commission which investigated the soft coal industry in 1920, the store coal against the pressure of demand in the winter months. On this point the commission in its report to President Wilson, wrote:—

“The solution of the (coal) problem is to bring about evenness of production and distribution.....It is evidently the public's duty to aid in the stabilization of the coal market by purchasing and arranging to store as much coal as possible during the spring and summer.”

By taking the coal when it is mined and storing it away, the public can do something for itself that the mines are unable to do.

CAR SHORTAGE EFFECT IN 1920 EXPERIENCE

How thoroughly the lack of sufficient transportation permeated the soft coal problem in 1920 and acted as the prime factor in limiting the output of the mines was clearly revealed in the congressional inquiry.

Whichever way the investigation turned, the difficulty of obtaining a constant and satisfactory car supply kept cropping up. Inquiries directed to government experts, railroad officials and coal men alike found them agreed on the salient point that had the bituminous coal mines in 1920 been given plenty of cars there would have been no coal shortage emergency.

Equal emphasis was laid by one witness after another on the fact that the public has in its power to moderate greatly the transportation problem by ordering its coal in the off-season so as to effect a more even distribution of the transportation burden throughout the year.

Of the actuality and the severity of the coal shortage of 1920, brought on by the lacks of cars, there was ample evidence before the Senate investigators.

Although soft coal producers had begun the year with the two-fold task of meeting immediate consumption as well as building up the reserves which had been depleted by the unprecedented miners' strike of 1919, the industry was on its way to a fair performance when it was suddenly overwhelmed, in April, by the disastrous outlay switchmen's strike.

The effects of this unexpected break of car service, which dominated the situation for months, were immediate and far reaching. By June 1, the drain of demand had resulted in reducing consumers' stocks to 20,000,000 tons, the lowest figure on record for that time of year.

Portraying the condition of car shortage and of coal shortage, Director George Otis Smith, of the Geological Survey, wrote in December, 1920, in a letter to Senator Edge, of the Senate committee on reconstruction and production;

"No sooner were the rail gateways clogged with freight than delays in the placing of empty cars at the mines brought about the most acute car shortage in history. The result was a condition of stress.

"There was not lacking at that time those who denied the existence of a shortage and predicted that the output during the remainder of the year would make good the deficiency. The fact that the deficiency has since then been largely made up does not alter the reality of the shortage which existed in the spring and summer."

As to lack of transportation being at the bottom of the 1920 coal shortage, Director Smith wrote:

"Throughout the period of high prices from April to November the dominant cause limiting output has been transportation. Weekly reports, received by the Geological Survey from operators representing more than half the tonnage in the country show that except for occasional strikes, the thing that has prevented supplying coal desired by consumers has been lack of transportation."

To the same point, illustrated by concrete figures is the testimony of Mr. Tryon, Statistician of the Survey, who said to the Senate Committee on Manufactures:

"Had it been possible when Government prices were lifted on the first of April 1920, to immediately supply the mines with cars enough to produce 12,000,000 tons a week, as we have done during the last quarter of 1920, the emergency would have been quickly overcome. Consumers who were not getting deliveries on their contracts would have received the coal they needed and the market would speedily have been broken."

And if more were needed to make clear what happened in 1920 here is the emphatic statement of Edgar E. Clark, Chairman of the Interstate Commerce Commission expressed in a single sentence:

"If all the mines had had a 70 per cent car supply there would never have been any question of car shortage because they would have had all the cars they could use."

"SHOWBIRD" MINES AND "SPOT" COAL.

In any soft coal stringency "spot" coal and "snowbird" mines play a conspicuous part. They did in 1920.

The dislocation of the transportation arm of the industry that year caused anxious consumers who had not previously arranged for their coal, as well as contract customers who were unable to obtain full deliveries, to turn to the "spot" or free coal offered in the open market.

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It was in a limited portion of this "spot" coal that there occurred the gambling which played havoc with the market and set up abnormal prices.

"Only a portion of the tonnage of the coal moving at the time was sold at these (high) prices," was the statement of Director Smith of the Geological Survey in his letter to Senator Edge. "The bulk of it remained as before, under contract, at prices negotiated before the shortage was foreseen."

"Spot" coal, it must be understood, represents only a fraction of the aggregate output of the nation's mines. The great bulk of soft coal produced is shipped on yearly contracts which cannot come under the influence of market manipulators for the reason that prices are written into the contracts when made, usually in the spring of the year.

In ordinary times "spot" coal comprises about 20 per cent of the yearly output of soft coal but in times of shortage it runs somewhat higher, due to the advent of the "snowbird" mines. These mines do not operate ordinarily, because of their high cost of production but await a market stringency upon which to prey. They have no responsibility as to the substantial welfare of the industry and its permanent relations to the consumer.

By throwing their output in to the spot market, at the same time taking the highest prices offered by excited bidders, these "mushroom" mines exert an influence on the open market greater than their yearly tonnage would indicate.

SMALL AVERAGE PROFIT ON BITUMINOUS COAL

Evidence of bituminous operators in the National Coal Association, submitted before the Senate Manufactures Committee, based on reports embracing 100,000,000 of tonnage produced from January 1 to October 1, 1920, taking in the acute period of the shortage, showed an average sales price of \$3.47 a ton at the mine. The operators showed that the cost of producing that coal was \$2.76 a ton, leaving a gross margin of 71 cents a ton. Out of this margin, they explained, deduction must be made for taxes and interest on bonds and borrowed money, so that the actual average profit derived would be nearer 35 cents a ton.

The operators' data covered approximately one-fourth of the tonnage for the period involved and embraced reports from all of the fields. Out of the entire output reported upon, it was revealed, 78,500,000 tons sold at prices averaging less than \$4 per ton, 14,000,000 sold at average prices between \$4 and \$5 a ton, and only 7.81 per cent of the total, sold in excess of \$5 a ton. The latter was the output of small mines whose productive cost was high.

After the coal shortage had been overcome, late in the fall, due to adequate car supply, prices at all the bituminous mines dropped to normal. In some fields, after January 1 prices went to the lowest level they had reached in a year's time. In fact, the bottom literally fell out of the market.

RAISE IN WAGES AND FREIGHT RATES ADD TO COST OF COAL

Although the average mine prices of bituminous coal are higher than they were before the war, the operators made it clear at the Senate hearings that the advanced

cost of labour and supplies have made it impossible to sell coal on a pre-war basis, with any profit.

While the rise in the cost of supplies from 10 cents a ton to 35 and 40 cents a ton is no small item, the big factor in the increased cost of mining coal is the outlay for labour, which runs about 70 per cent of the total cost in production.

Since 1914, the soft coal industry has had to sustain six successive increases in wages. These increases have added, it is estimated, \$1.70 to the cost of each ton. On a yearly production of 550,000,000 tons this would represent an increase of \$935,000,000 in wages alone over what it cost to produce soft coal before the war.

Also, there has been a heavy advance in freight rates and delivery charges, for which the operator is in no wise responsible, but which the consumer has to pay.

Freight rates have approximately doubled since 1914. Where the average freight rate was about \$1.50 a ton in pre-war days, the average rate now, so far as it is possible to strike an average, is about \$3 a ton. For long distances from the mines the freight rates run much higher than \$3 a ton.

This increase of \$1.50 applied to a yearly production of 550,000,000 tons, represents an advance in the cost of coal to the consumers of the country over, on account of freight charges of \$825,000,000.

Taken together, advances in wage scales and in freight rates since 1914, it is estimated, have added \$1,750,000,000 to the yearly coal bill of the nation.

HOW CAR DEFICIENCY RAISES COST OF COAL

It is an economic fact that car shortage exerts an immediate and unmistakable effect on the cost of producing coal. Extended observation by Government experts of experience of the industry has established the close relationship of car shortage to coal cost.

The sequence of events is inevitably this: When cars become fewer, the working time of the mines becomes less, and the producing cost goes up. This is for the reason that certain expenses involved in keeping a mine in producing condition, such as pumping out the water and keeping the mine free from gas, are going on all the time. All of these mounting expenses incurred in time of idleness figure in the ultimate production costs when the mines resume shipping coal.

How transportation deficiency raises the cost of coal is graphically shown by charts embodying data assembled by the United States Fuel Administration. In figures the story is this:

When the car supply falls below normal by	The coal cost rises above normal by
20 per cent	12 per cent
30	19.5
40	29.0
50	40.5
60	54.5
70	74.0
80	98.0

Applying the data given in this table to any period of car shortage the advance in production cost in dollars and cents, attributable to lack of cars, may readily be estimated.

A shortage of 50 per cent in car supply, such as obtained with most of the soft coal mines in the spring of 1920, would involve a rise of from 70 cents to \$1 per ton, and more, on the production cost alone, varying with the different mining fields.

In a word, the gist of the soft coal problem to-day, from the standpoint of public concern, is how to make effective use of the lamentably restricted transportation facilities of the country.

To attempt to crowd the hauling of the bulk of the nation's coal into the fall and winter months is admittedly hazardous, from every viewpoint. For the consumer it means a risk as to his winter's supply that he can ill afford.

The user of bituminous coal, in fairness to himself, ought not unwittingly put himself at the caprice of a possible shortage emergency when, by using reasonable precaution, he with certainty could avoid it.

Only one logical way out is clear—to keep coal moving to the market.

If this were brought about, through active co-operation on the part of the consumer with the other forces involved, the nation never would face the danger of a coal shortage emergency.

The CHAIRMAN: We had some of these men called to give evidence on water transportation on Saturday, but they advised us they were unable to be here,—

Mr. KEEFER: Saturday happened to be the day of a meeting of the company of which one of these men was the general manager. I think if we called for him again, he will come. I think it would be better perhaps to ask for the president of the company, Mr. Norcross.

Mr. CHISHOLM: Who is Mr. Norcross?

Mr. KEEFER: He is the president of the Canada Steamship. He is a very experienced shipping man. Now, can my friend Mr. McKenzie suggest somebody from the Maritime Provinces?

Mr. MCKENZIE: I think I gave two names to the Chairman from whom he could get some information in regard to the shipping business.

Mr. KEEFER: I would like to have this Committee get Captain Norcross, the head of the Canada Steamship Company. Mr. Birks was the man we were going to bring here on Saturday. He is an excellent man, but I think he is the passenger manager, and I think it would be better to have Mr. Norcross.

Mr. CHISHOLM: He is also vice-president of the Dominion Steel?

Mr. KEEFER: I do not know. I do not know him in connection with the Steel Company. I did not want him here for that purpose. I wanted him here in regard to water transportation.

Mr. MAHARG: Where is Mr. Norcross' home?

Mr. KEEFER: Montreal. Then there is another man, the harbour engineer of the city of Toronto, where they are laying out the work for deep-water transportation.

The CHAIRMAN: What is the pleasure of the Committee in regard to this matter?

Mr. KEEFER: As regards the Nova Scotia end either Mr. McKenzie or Mr. Douglas ought to be able to assist us. I am giving you a suggestion regarding the Interior Lake end of it.

Mr. MCKENZIE: We ought to get experts from Montreal.

Mr. KEEFER: Unfortunately, some of the shipping men in Montreal are not in favour of any shipping going past Montreal by water.

Mr. DOUGLAS (Cape Breton): I think we should summon Mr. Teakle of the Canadian Government Merchant Marine.

The CHAIRMAN: Will someone make a motion?

Mr. KEEFER: I would suggest we get Mr. Teakle and Mr. Norcross. Those two men are from Montreal.

The CHAIRMAN: Do you make that as a motion?

Mr. KEEFER: Yes.

Mr. DOUGLAS (Cape Breton): I second that motion.

The CHAIRMAN: When?

Mr. KEEFER: As soon as possible.

Motion agreed to.

The CHAIRMAN: Now, that is decided, that these gentlemen be notified to come. Now, what other evidence and what other witnesses does this Committee desire? We had already decided last week that we would close up on Saturday if possible, and we are departing from that policy. If we are going to close up and make a report to the House, let us decide it now.

Mr. McKENZIE: In answer as to further witnesses: I want to call as many of the managers of these coal mines from the west as you think would make a fair test of the cost of coal as produced out there, and have their costs sheets here. I purposely asked Mr. Dougall when he was on the stand how many of these coal corporations were represented before this Committee, and he named five or six of them, and I understand Mr. Young, himself, said he represented fifty-one or fifty-two per cent of the coal producers in the west. Inasmuch, as it is only fair if we are going to have the costs sheets of one concern, we should have the experiences of the others. I move that if we are going to persist in examining the pay sheets of one company, that the same rule apply to all, and that such companies as the Committee may decide be sent for with the pay sheets from the west, as well as from the east.

Mr. DOUGLAS (Cape Breton): I second that motion.

The CHAIRMAN: What is your pleasure?

Motion agreed to.

The CHAIRMAN: You had better specify the companies you wish to call.

Mr. McKENZIE: I mentioned no witnesses, because I have not them in my mind.

Mr. DOUGLAS: The International Coal and Coke and the Crow's Nest. Those were the two largest, I think he said.

Mr. McKENZIE: I do not think we took all of them or anything like all of them. We should take four or five of the largest ones. Personally I am not able to name them.

Mr. DOUGLAS (Cape Breton): Take the two largest ones to start with.

Mr. Hudson, I will read them off: The Crow's Nest Coal Company of Fernie; they operate the Michel Coal Creek mine. Their local office is in Fernie, but their main office is in Toronto. Mr. Wilson is the president of that company, and their office is in Toronto. That is in the Pass. If you come down the hill, there is the Canadian Western Fuel Company, the biggest people at Nanaimo.

By Mr. McKenzie:

Q. What I want to get at is this, that we select whatever companies Mr. Young has represented here. The motion permits us to call some who were represented. We cannot travel beyond that. He named a group there.

Debate followed.

Mr. DOUGLAS: I move that the auditors of the International Coal and Coke Company and the Crows Nest Coal Company be called.

Further debate.

Mr. MAHARG: I would like to know Mr. Young's official position, if you can give it. Was he representing the Coal Operators' Association?

Mr. COWAN: Secretary of the Coal Operators' Association.

Mr. MAHARG: There is a motion before the House, made by Mr. Douglas. I do not see where we are going to get at. I have no objection to these men being called, but it seems to me it is a physical impossibility to carry it out and get the results from it in the limited time we have at our disposal. I am not quarrelling with the principle.

Mr. COWAN: We started out to do a certain thing, and we should do it, if we stay here all summer. I do not care how long it takes us. I am just Scotch enough to stick to this game until I succeed.

The CHAIRMAN: Is there a motion made by Mr. Cowan—

Mr. DOUGLAS (Cape Breton): I made the motion.

The CHAIRMAN: If you press that motion I will have to rule it out of order.

Mr. DOUGLAS (Cape Breton): I made that motion.

The CHAIRMAN: What was that motion?

Mr. DOUGLAS (Cape Breton): Following the terms of Mr. McKenzie's resolution, that the International Coal and Coke Company and the Crow's Nest Coal Company—the auditors of these companies—be called to give evidence to produce their original cost sheets from 1912 up to date.

Mr. COWAN: Did you say that was out of order?

The CHAIRMAN: It has not yet been seconded.

Mr. COWAN: I will second it.

The CHAIRMAN: I rule the motion out of order.

Mr. COWAN: Will you tell us what motion we may make.

The CHAIRMAN: It is for the Committee to make the motion.

Mr. DOUGLAS (Cape Breton): The Chairman, I presume, will give the reasons for his ruling?

The CHAIRMAN: I think I have given my reasons very fully. They are in the minutes.

Mr. DOUGLAS (Cape Breton): No, at your direction, the stenographer was not taking evidence at the time.

The CHAIRMAN: That it is inconsistent with the policy of the Committee as adopted by this resolution.

Mr. MAHARG: That can be gotten around by rescinding one resolution and bringing in one upon which we can act.

Mr. COWAN: Can we appeal against the ruling of the Chair?

Mr. CHISHOLM: Yes, you can appeal against anything.

Mr. COWAN: I certainly can see no inconsistency in the motion as made by the mover.

The CHAIRMAN: The Chairman has given his ruling; if you are not satisfied, take such steps as you choose. I think this Committee is being made a most ridiculous one, that is evident. We are here within a few days of the closing of the session, and you suggest calling operators from Alberta, when every member of the Committee knows it is practically impossible to hear them and deal with their evidence simply for—I will not say what the purpose of it is—but let us get down to business, let us act as a business Committee, and deal with this matter in a business-like way, regardless of our prejudices, or our aims or purposes, except in so far as the appointment of this Committee has its aims and purposes.

Mr. COWAN: Why did you not rule the original motion out of order, as made by Mr. McKenzie?

The CHAIRMAN: That was quite consistent with the policy—quite in line with the policy of the Committee.

Mr. COWAN: This is carrying out that resolution.

Mr. MAHARG: Put the word "first" in your motion; that is all you need.

Mr. DOUGLAS (Cape Breton): I do not think anything can be more consistent.

Mr. MCKENZIE: My motion was perfectly in line with the resolution, that everybody represented here be called. That was right in the heart of the resolution, but the motion made by Mr. Douglas was to cut that into some fraction and take a part of that. The Chairman is quite right in saying that to take a part of the number called here is irregular, and not supported by the resolution.

Mr. DOUGLAS (Cape Breton): Does that mean we cannot pass another resolution to-morrow asking for another company to appear?

Mr. McKENZIE: We can do that, but we must abide so far by the resolutions that we have.

Mr. COWAN: It is a physical impossibility to call all these people here at once. You have got to start somewhere, and we are proposing to start under your own resolution.

The CHAIRMAN: That resolution has not been accepted—

Mr. DOUGLAS (Cape Breton): Which one?

The CHAIRMAN: The resolution of Mr. McKenzie has not been accepted, 'except in part.

Mr. DOUGLAS (Cape Breton): It was declared carried.

Mr. COWAN: I said we were accepting his own resolution by calling these two companies. We have to start, and if we do not start, we will never finish, that is certain.

The CHAIRMAN: It is impossible to finish with all the companies from the west. That is the obstacle. Mr. McKenzie says that all these men be called. That is a physical impossibility, therefore, none shall be called. That is my view.

Mr. KEEFER: The motion I heard was that we pick out two or three, and Mr. McKenzie was picking out names.

The CHAIRMAN: Mr. Reporter, will you read Mr. McKenzie's motion?
Motion read.

Mr. DOUGLAS (Cape Breton): Now, will you read mine?
Motion read.

The CHAIRMAN: Now, read Mr. McKenzie's again.
Motion read.

Mr. COWAN: "Such as the Committee may decide"—

The CHAIRMAN: The Committee can only decide the matter in the light of a resolution which has been passed, "that the coal operators be called as witnesses by this Committee," and so on, "that the auditors of all the coal companies appearing before this Committee," and so on. You are departing from this resolution in deciding we shall call some and not call others. I think Mr. McKenzie's motion left it open, as I understand it, so that we can get the names of the coal operators who had appeared before the Committee and call them. He could not put them in his motion, because he did not know the names.

Mr. KEEFER: Unless my ears deceive me, that is not what he said.

The CHAIRMAN: I care not what Mr. Keefer has heard. I care only what was in the resolution.

Mr. KEEFER: It was never contemplated to call all these people except for reasons which may arise latter.

The CHAIRMAN: The resolution of Mr. McKenzie's says that we deal the same with all.

Mr. KEEFER: With all due deference, Mr. Chairman, that was not what Mr. McKenzie said.

The CHAIRMAN: Mr. Reporter, will you read Mr. McKenzie's resolution again?
Motion read.

Mr. KEEFER: Will you read what was said after that, Mr. Reporter?

The CHAIRMAN: That has no effect. The only effect is the effect of this resolution.

Mr. KEEFER: It was on those remarks that we passed that resolution.

Mr. McKENZIE: I had in mind that the same rule should apply to all.

Mr. KEEFER: Certainly, but we are not going to exercise it unless we have to.

Mr. COWAN: You cannot do anything else. It is a physical impossibility to do anything else.

Mr. MAHARG: Will you give me the date of that, Mr. Chairman.

The CHAIRMAN: Which one do you mean?

Mr. MAHARG: The one outlining the original policy.

Mr. CHISHOLM: There were two resolutions.

Mr. MAHARG: The second one.

The CHAIRMAN: The twenty-first: "That coal operators called as witnesses by this Committee be obliged to furnish the Committee with detailed monthly statements from 1912 to date, of the cost of production of coal per ton showing therein all items separately entering into said cost, said statement to be certified by their auditors".

That was at the meeting held on April 21st. I think it was entered by the Clerk, later another resolution reading, "all coal operators appearing before this Committee to personally attend with the original costs sheets mentioned in the resolution of April 21st, for the purposes of examination thereon" was passed.

Mr. COWAN: Precisely. "All appearing" and we want these men to appear. We do not ask any others. We are naming them now.

Mr. KEEFER: Should we want others, we can call them later.

Mr. COWAN: Sure, that is right.

Mr. McKENZIE: Mr. Young represented about fifty-one or fifty-two per cent of all the operators in the West, and according to the resolution they should be here.

Mr. KEEFER: Did I not understand you to say that we were not going to call all of them, but just two or three of them, did you not say that?

Mr. McKENZIE: No, I said "all" I could not make it anything else but "all".

Mr. KEEFER: Is that what you said?

Mr. McKENZIE: The notes will show.

The CHAIRMAN: Will you read Mr. McKenzie's motion again.

Motion read.

The CHAIRMAN: I rather resent that sort of thing. I have had this motion read three or four times, and I do not propose to have Mr. Keefer represent to this Committee that I am misrepresenting this resolution. It is very explicit in its terms that the same policy shall apply to all.

Mr. KEEFER: The resolution is very explicit. The conversation that took place before the motion was carried should be read, as it was upon that conversation preceding the motion and following it that we voted. We should have that read.

The CHAIRMAN: The resolution must guide the Committee. It is not the discussion of the resolution made by Mr. McKenzie or any member of the Committee afterwards. It was the resolution voted by the Committee that must guide us.

Mr. DOUGLAS (Cape Breton): We are dealing specifically with that resolution. I offered a resolution seconded by Dr. Cowan, which I understand you ruled out of order. I am very sorry you ruled it out of order. The intention is to make it absolutely consistent with what has already been done. That is the reason why the resolution is tendered. If you say that the resolution is not in order, I will have to ask leave to appeal against your ruling.

The CHAIRMAN: The Committee has heard my ruling. It is quite impossible at this stage of the session, within a few days of the close of the session, to call all the operators that have appeared before us; and in view of that, it is not carrying out the policy of the Committee to call some of them and not all of them.

Mr. COWAN: Then the proper thing to do was to rule out the motion by Mr. McKenzie, because my motion is based entirely on his, and is entirely carrying out his resolution. So if this motion is out of order his should have been ruled out of order.

The CHAIRMAN: Not at all. I am sorry that I have not before me the exact wording of the resolution. It says, "Such operators as the Committee shall decide upon." That is not the exact wording. Under the previous resolutions of the Committee, the only operators that the Committee can decide upon are those specified in the resolutions of April 21 and April 26, and those are the whole of the operators called as witnesses and the auditors of all coal companies appearing before this Committee. If you decide on anything else you are not following the policy as expressed in those resolutions.

Mr. COWAN: I cannot see your line of reasoning at all. I am quite willing to bow to the ruling of the chair at any time, but this is one case where I think you are entirely in error.

The CHAIRMAN: It makes no difference to me what you think. The ruling of the chair is before the Committee, and we must either get down to business or take some action on the ruling of the chair.

Mr. DOUGLAS: Well, I appeal from the ruling, Mr. Chairman.

The CHAIRMAN: As I said before, if the Committee would just get rid of those prejudices which probably we have in our minds, and consider what is the best work that this Committee can do between now and prorogation—to my mind, the best work we can accomplish is to get our report before the House and have that report dealt with. I think the Committee would be in a better frame of mind to come to a reasonable and wise decision rather than call a number of coal operators at the cost of thousands of dollars to this country, the evidence of whom we cannot get before the Committee before prorogation if we are to present our report. It is absolutely impossible.

Mr. MAHARG: Did not Mr. McKenzie in making his statement say such companies as the Committee shall decide upon should be called?

Mr. MCKENZIE: I may not have been very correct in my language but my intention was that every single person or corporation who was represented here either by the manager or by someone else must be treated exactly alike, and that they all be called.

Mr. KEEFER: I certainly heard you say such companies as the Committee shall decide upon.

Mr. MAHARG: Did you not go on to state that such companies as the Committee shall decide upon be called or should now be called?

Mr. MCKENZIE: I may have said that without thinking the matter out fully but I also said that if one company was to be called every company should be treated alike. Nothing else would be fair unless the companies agreed among themselves to send a representative of some of the companies here. Then they would not have any reason to complain. If the group in that association in the West that was represented here by Mr. Young would agree to send the pay-sheets of one or two of the companies, I would have no objection at all. But I do not want to pick out one or two companies and make them expose their private business and leave the others out, unless they themselves agreed to it.

Mr. MAHARG: Mr. Chairman, you gave us your interpretation of Mr. McKenzie's remarks and I take it that it means that all the companies be called.

The CHAIRMAN: Yes, all that have appeared before this Committee.

Mr. MAHARG: And you give as a reason for ruling the motion out of order that it is physically impossible.

The CHAIRMAN: That is one reason.

Mr. MAHARG: That is the reason you should have given when Mr. McKenzie's resolution was introduced.

Mr. KEEFER: May I move—

The CHAIRMAN: Excuse me, let us get this straightened out. I think I have explained to the Committee already that in a measure Mr. McKenzie's resolution is quite in order.

Mr. MAHARG: In a measure.

The CHAIRMAN: I would say fully, in a full measure is quite in order.

Mr. MAHARG: That they all be called.

The CHAIRMAN: As the Committee may decide, but the Committee can only decide in terms of the previous resolutions which call for all coal operators and the auditors of all coal companies. When the Committee attempts to decide anything else it is out of order, and any motion purporting to decide anything else than that the auditors of all the coal companies be called is out of order.

Mr. COWAN: The only motion that would be in order would be that all those companies be called at once, 200 or 300 representatives. It is an utter absurdity.

Mr. KEEFER: May I move a resolution in amendment to clear the decks?—I voted for the resolution under an entirely different apprehension. "Moved by myself seconded by whosoever will, that the motion of Mr. McKenzie as to calling auditors passed this day be hereby rescinded." That will get a clear deck.

Mr. COWAN: No. I think that is just what Mr. McKenzie wants.

Mr. MCKENZIE: Mr. Douglas seconded my motion, and I thought I was quite safe in getting him to second it.

Mr. DOUGLAS: For the benefit of Mr. Keefer, would you kindly read the resolution I moved, which the Chairman ruled out of order, and in regard to which I have appealed from the Chairman's decision?

The CHAIRMAN: The Committee has heard your resolution, and it is not necessary to read it again.

Mr. MCKENZIE: If there is to be any appeal, the Chairman must write out his ruling. That is the rule. The same rules apply here as in the House, and if there is an appeal from the ruling of the Chairman of the Committee of the whole, the ruling is written out and then passed back to the Speaker, and a vote is taken.

Mr. MAHARG: A motion for adjournment is always in order, and I move that the Committee do now adjourn.

Mr. KEEFER: You cannot very well adjourn and leave this standing. Let us get this straightened out somehow.

The CHAIRMAN: Is it the pleasure of the Committee that we adjourn?

Mr. MAHARG: The motion has not been seconded.

Mr. MCKENZIE: I second it.

A vote having been taken.

The CHAIRMAN: I vote in favour of adjournment.

Mr. COWAN: I would ask that that vote be recorded.

The Committee adjourned until Tuesday, May 17th, at 10.30 a.m.

HOUSE OF COMMONS

COMMITTEE ROOM 425,

TUESDAY, May 17, 1921.

The Special Committee appointed to enquire into all matter pertaining to the future fuel supply of Canada met at 10.30 a.m., Mr. Steele, the Chairman, presiding.

The CHAIRMAN: So far as I am aware, we have no witnesses to appear before the Committee this morning. I will read some telegrams which the clerk has just handed me. They read as follows:—

THOS. H. HOWE,
Clerk of Committee,
Ottawa.

SYDNEY, N.S., May 16, 1921.

This acknowledges your telegram May fourteenth. Railway connections make it impossible for me to be present Tuesday. The cost sheets are not under my direct supervision. I am Assistant to the General Manager and in that capacity am assisting in securing information you require and suggest you advise me of extension of time.

H. H. McCANN.

THOS. S. HOWE,
Clerk of Committee,
Ottawa.

SYDNEY, N.S., May 16, 1921.

I have received your telegram fourteenth. Train connections make it impossible for me to be present Tuesday and further it will take some time to collect material for which you ask. Please advise me that I may have necessary time and I will use my best efforts to secure the available information as early as possible.

E. P. MERRILL.

THOS. S. HOWE,
Clerk of Committee, House,
Ottawa, Ont.

TRENTON, N.S., May 16, 1921.

Have your telegram to Mr. McColl summoning his appearance in Ottawa to-morrow. Fear cannot locate him in time for meeting to-morrow but am endeavouring to do so.

A. McKENZIE,
Private Secretary to Mr. McColl.

NEW GLASGOW, N.S., May 15, 1921.

Ottawa.

Yrs date McColl sgd Howe undld party away whereabouts unkn.

Ont.

Returned this morning from residence yrs 14th Gordon sgd Howe party said to be out of town, unable locate.

GLACE BAY, N.S. May 16, 1921.

Ont.

Pls notify Thos. S. Howe, Clerk of Committee his msg 14th to H. J. McCann General Manager Dom Steel Co. Glace Bay, N.S. undeld reason party lives in Sydney said to be away.

Fyle Clerk by 16A.

MONTREAL, QUE., May 16, 1921.

THOS. S. HOWE,
Clerk of Committee,
Ottawa, Ont.

Your telegram to Mr. D. H. McDougall received Mr. McDougall left for New Glasgow have forwarded your message him there.

Nova Scotia Steel and Coal Co.

HALIFAX, N.S., May 17, 1921.

DR. M. STEELE,
Chairman Parliamentary Committee on Fuel,
Ottawa, Ont.

Though I have not received any official notice I see by press despatches that I am required to attend again before Committee and bring many records covering a long period of operations. Unless my immediate return to Ottawa is requested I propose leaving meeting of my directors to-morrow and going to head offices of respective companies to secure information despatches indicate are required. Have already instructed office staff to get the material ready but I wish to state to collect details asked for will take a considerable time. I will attend before Committee with such information as soon as it is possible to assemble it.

D. H. McDOUGALL.

Those are all the communications which I have in connection with those witnesses. Yesterday it was decided to ask Mr. Norcross and Mr. Teakle to appear before the Committee at as early date as possible, and I have the following telegrams:—

MONTREAL, QUE., May 16, 1921.

Clerk Fuel Committee,
Ottawa, Ont.

Your message received, Mr. Teakle now on way to Ottawa, will be at Chateau Laurier to-night.

Canadian Government Merchant Marine, Ltd.

Fuel Committee, Ottawa.

MONTREAL, QUE., May 16, 1921.

Mr. Norcross out of city, expected back latter part of week.

C. C. BONTAR,

Secretary.

Mr. CHISHOLM: What is the date of that?

The CHAIRMAN: May 16. Before I came downstairs Mr. Teakle called me up to say he was in the city. He is up here in connection with an inquiry now going on before the special Railway Committee and says that it would be impossible for him to appear before the Committee to-day, and he could not say at present when he would be able to appear. He would be glad to appear as soon as possible, but until he is through with that inquiry he thought it would be impossible for him to appear before this Committee.

There is another matter I wish to bring to your attention. The Committee will remember that last week it was decided to close the taking of evidence on Saturday, or possibly Monday at the latest. We have departed from that decision. I had been given the names of several witnesses who desired to appear before the Committee, of more or less importance perhaps, but last week when I received these names I immediately wrote to the parties, saying it would be impossible to hear them, as the Committee intended to close their hearing Saturday or Monday, and our programme was full until that date. However, since the Committee has decided to depart from that arrangement and did not close the hearings, I thought the better plan now was to bring the names of the parties desiring to appear before the Committee to your attention, and let the Committee deal with them. There is a Mr. Graham of Toronto who had been recommended to me by two or three parties, who would be glad to attend before the Committee and give evidence on the peat question. I learned that he was in the city to-day and prepared to appear before the Committee if the Committee desired, if not to-day at any time the Committee chooses. A Mr. Cromer, who is the representative in Ontario of the Board of Railway Commissioners, I am told, can give the Committee much valuable information. I saw an article of Mr. Cromer's, and it seems to me his evidence would be valuable if the Committee chose to take the time at this stage of the proceedings to hear him.

We have also a communication from Mr. Jackson, of Toronto, who is interested in the charcoal range, which he is anxious to have brought to the attention of the Fuel Committee. Yesterday Colonel Mackie brought to my attention the fact that there is in the country at present, and in this district, I think at Pembroke, a Mr. Brown, who has had about twenty years' experience in connection with the peat industry in Europe. Colonel Mackie's suggestion was that if the Fuel Committee could hear him he was sure, after having had a conversation with Mr. Brown, that he would give us some very valuable information on the peat industry in Europe.

Mr. ROSS: Does he know anything about the situation in Canada at all?

The CHAIRMAN: I do not know that he does, because he has just arrived. I promised Colonel Mackie I would bring his name before the Committee this morning.

Mr. HOCKEN: Have you decided not to call Mr. Graham, of Toronto?

The CHAIRMAN: I wrote him last week to that effect.

Mr. HOCKEN: He had a process for drying peat which was said to be economical and efficient.

Mr. KEEFER: Is there a committee on peat?

Mr. HOCKEN: There is a joint committee.

Mr. KEEFER: Is there not a proper place for these peat gentlemen to appear?

Mr. HOCKEN: I am not pressing it. This gentleman came to see me in Toronto.

Mr. CHISHOLM: It would be very satisfactory if we could get him here. He has made a special study of it.

The CHAIRMAN: The Committee might come to a decision on the question whether we are going to hear any new witnesses or not. If the Committee choose to hear them, then select them from this list, or any other names that might be suggested of those you desire to hear.

Mr. MAHARG: The matter of new witnesses would seem to hinge round how we intended to dispose of those we have already called for. Those wires would indicate a willingness on the part of at least some of the men to give us the information we have asked for, if we give them time to procure it. I think if we are going to give the time for Mr. McDougall and this other gentleman whose name was mentioned, then we would have time to take other witnesses if we thought it advisable.

Mr. COWAN: How long is it since we first sent notice that we required the presence of these witnesses here? The question is whether they are making any reasonable effort to be here.

The CLERK OF THE COMMITTEE: A letter was written to them April 29.

Mr. MAHARG: That would be the first notice that was given to Mr. Wolvin, would it?

The CLERK OF THE COMMITTEE: Mr. McDougall and Mr. Wolvin.

Mr. MCKENZIE: Was it since then we examined both Wolvin and McDougall?

The CHAIRMAN: No, before that.

Mr. COWAN: It would appear to me as if they had made no progress whatever in the matter of getting this information that we want between then and now. It would look to me as though they were just starting in—accepting their statements in good faith—to do what we asked them three weeks ago.

Mr. MCKENZIE: What did you say to them on the 29th?

The CLERK OF THE COMMITTEE: The telegram reads as follows:—

D. H. McDUGALL, Esq.,

President, Nova Scotia Steel and Coal Co.,

New Glasgow, N.S.

DEAR SIR,—

By direction of the Fuel Committee of the House of Commons, I am transmitting a copy of Motion adopted by said Committee at a meeting held on Thursday, April 21. The motion reads as follows:—

“That Coal Operators called as witnesses by this Committee, be obliged to furnish the Committee with detailed monthly statements from 1912 to date, of the cost of productions of coal per ton, showing therein all items separately entering into said cost. Said statement be certified by their auditors.”

At a meeting held on Thursday, April 26, the Committee made the above motion, more explicit, by resolving thus:—

“That the Auditors of all coal companies appearing before this Committee do personally attend with the original cost sheets mentioned in the Resolution of April 21, for the purpose of examination thereon.”

Please be good enough to inform me, by wire, on what day the auditors of your company will be able to appear in person before the Committee with original papers in question.

Respectfully,

(Sgd) THOS. S. HOWE,

Clerk Fuel Committee.

Then the summons based on that letter was sent on May 3.

Mr. McKENZIE: To whom was the summons addressed?

The CLERK: To Mr. McDougall and Mr. Wolvin.

Mr. DOUGLAS: To appear on what date?

The CLERK: (Reads)

"You are hereby summoned and required to cause Archibald McColl, Secretary-Treasurer, Nova Scotia Steel and Coal Company, to appear in room 425, House of Commons at 10.30 a.m. Wednesday, May 11, 1921, and to then and there produce original monthly cost sheets from 1912 to date showing cost of production of coal per ton and all items and details separately entering into said cost and all other papers in any way relating to same."

Mr. McKENZIE: That is May 3rd?

The CLERK: May 3rd.

Mr. McKENZIE: Have we any knowledge of when that citation reached the parties to whom it was addressed?

Mr. COWAN: That was sent by wire?

The CLERK: Yes.

Mr. COWAN: And if it was not delivered, you would be immediately notified to that effect. There is no question as to its delivery.

The CLERK: I think that these telegrams read by the Chairman are the first official notification.

Mr. DOUGLAS: Since then we had a wire on the 12th from Mr. McDougall. First, the Chairman had a wire on the 10th in which Mr. McDougall said he was writing. I think that appears in the evidence. It was not directed to the Clerk, but to the Chairman. On the 10th, Mr. McDougall said he was writing, and on the 12th, he wired the Clerk of the Committee saying that he had not mailed his letter of the 10th. The circumstance to my mind look very, very bad. A person wires on the 10th of the month that he is writing a letter explaining the matter, and then on the 12th, he telegraphs again saying that he has not mailed the letter of the 10th. That does not look like playing the game.

Mr. MAHARG: I think that was on account of their solicitor appearing.

Mr. DOUGLAS: I take it that it was the very plain duty of these gentlemen to attend anyway, and if they did not have the documents, or if there was any reasonable explanation, or any explanation at all, that they desired to give, this was the place to make it. But they certainly have to attend. Now, if instead of these telegrams—this is not a debating society that we are carrying on between those people in Nova Scotia and this Committee—those people could attend, and if they have any explanation to make, here is the place to make it, before this Committee.

Mr. KEEFER: Is there anybody here representing those people who can say when they could attend? any counsel or anybody else?

The CHAIRMAN: You will remember that the companies have already been represented before the Committee by counsel in the person of Mr. Chrysler. Whether that was a proper procedure for them to take, or not, is perhaps open to question.

Mr. CHISHOLM: There is no doubt that these people are going to come. There is no doubt that we are going to get this information, surely.

Mr. COWAN: There is a very great doubt.

Mr. CHISHOLM: I do not care what anybody else says; so far as I am concerned, I take it that those people have to come here, and we have the machinery to bring them here; that is all.

The CHAIRMAN: The Clerk wishes to read two other telegrams.

The CLERK (Reads):

OTTAWA, May 11.

D. H. McDougall, Esq.,
Vice-President, Dominion Coal Company,
Montreal, Quebec.

At a meeting of Fuel Committee this morning, I was instructed by Committee to require you to have your auditors McColl and Gordon with the necessary documents, appear before this Committee not later than Friday, the 13th inst., at 10.30 o'clock at Room 425 House of Commons.

(Signed) THOMAS. S. HOWE,
Clerk of the Fuel Committee.

This telegram is undated.

THOMAS HOWE,
Secretary, Parliamentary Committee on Fuel,
Ottawa, Ont.

Your telegram received. We are submitting matter to our legal advisers and will reply after they have given consideration. In view changed conditions I have withheld letter to Dr. Steele mentioned in my telegram May 10th.

D. H. McDougall.

Mr. DOUGLAS: You say that the telegram is undated?

The CLERK: It is undated in this.

Mr. DOUGLAS: My recollection is that that telegram was dated May 12th. That was the point I was making. Mr. McDougall telegraphed on the 12th stating that he was not sending the letter which he said he was mailing on the 10th inst. It looked a very bad thing.

Mr. COWAN: I cannot for the life of me see how we are going to make any report dealing with the Nova Scotia situation and the prospect of getting Nova Scotia coal into Quebec and Ontario until we know something about the cost of that coal. Until we get that information, I do not know how we can act and bring our report into the House. We have nothing to report. I do not want to recommend that any action be taken to assist Nova Scotia in bringing in that coal until I know the basis on which we can get that coal.

Mr. McKENZIE: We have the sworn testimony of the sales agent of the Dominion Coal Company as to what he can land the coal at Montreal for. We can say that we do not believe him if we like and that we should get better evidence; but we have that evidence.

The CLERK: The typist in getting this telegram copied left the date out. I see the date was Montreal, May 12th.

Mr. DOUGLAS: That was my recollection. Would you read the telegram of May 10th?

The CLERK: I have not got it, I never saw it.

Mr. DOUGLAS: That telegram was read here.

Mr. KEEFER: To make a long story short, as Mr. McDougall has wired that he will be here, why not act on that telegram and fix a time?

Mr. COWAN: That is good business, but we have fixed so many times in connection with this matter. None of them state in their telegrams how long it will take, or how long they will require to have the information.

Mr. KEEFER: We cannot undo the past. Mr. McDougall says he can be here at sometime. Let us deal with that now.

Mr. COWAN: I do not want to ask them to do anything that is not reasonable.

Mr. CHISHOLM: Mr. McDougall does not say he will not come.

Mr. DOUGLAS: No, but he stated on 10th May that he was writing the Chairman of the Committee, and on 12th May that telegram was read. Inadvertently, the date was dropped out of the copy of the telegram which Mr. Howe read, but it appears that it was dated May 12th; and on May 12th he wired that he was not sending the letter referred to in his telegram of May 10th. The telegram of May 10th does not appear to be there.

The CHAIRMAN: Does the Committee wish that telegram? I do not know whether the telegram came to me or to the Clerk. If it came to me, it will be with the telegrams relating to the Committee in my room.

Mr. ROSS: It has been suggested that it is on the record.

The CHAIRMAN: I think it is. I do not know what is to be gained by reading that telegram anyway, but just to let the Committee understand that I am not endeavouring to reserve anything from the knowledge of the Committee, I will go and get it.

Mr. DOUGLAS: I was not suggesting anything of the kind.

The CHAIRMAN: In fact, I cannot recall at present whether I received the telegram or Mr. Howe. I think it was Mr. Howe, because he referred to writing to Dr. Steele.

Mr. DOUGLAS: Personally I do not know who received it, nor do I impute any motive to anyone. But the point is important inasmuch as we are dealing with Mr. McDougall's further telegram, and the question is, can we deal with it as having been sent in good faith or not, and I say on the question of good faith that in the telegram sent on the 10th of May Mr. McDougall said he was writing on the 12th, and that on the 12th he telegraphed that he had not sent the letter. That should be considered along with this present telegram.

Mr. KEEFER: This telegram from Mr. McDougall of May 17th, is definite and also indefinite. He says:

"Unless my immediate return to Ottawa is requested, I propose leaving meeting of my directors to-morrow and going to head offices of respective companies."

Where is that?

Mr. MCKENZIE: New Glasgow and Sydney.

"To secure information despatches indicate are required. Have already instructed office staffs to get the material ready but I wish to state to collect details asked for will take a considerable time. I will attend before Committee with such information as soon as it is possible to assemble it."

There is nothing definite about that.

The CHAIRMAN: I will read this telegram which appears in the record, though I do not think it is the one Mr. Douglas refers to. (Reads).

Mr. STEELE,

Chairman, Parliamentary Fuel Committee,

House of Commons,

OTTAWA, ONT.

MONTREAL, QUEBEC,

MAY 10th, 1921.

"Regret will be unable to have ready for Wednesday cost data which has been requested by Fuel Committee. Writing."

D. H. McDOUGALL.

Mr. DOUGLAS: That is the one.

The CHAIRMAN: That is already on the records of the Committee.

Mr. COWAN: How long do you suggest giving them to be heard, Mr. Keefer?

Mr. KEEFER: What I would say is this: The House is going to prorogue shortly and we may report as to the advisability of continuing this investigation. The matter was of importance because our National Railways wanted coal, and the parties could not agree upon the price. We had evidence given with great variation between April 14th and the present time, and since then the parties have come together and agreed upon a price, that is the railways and the coal company. The price of this coal is only material in this respect, does it affect the question of supply? Otherwise, we have no function in my judgment in going into any other question as to whether this company is profiteering, getting too high prices, or anything of the kind. But if the price of coal has any relation to the supply of coal, we ought to get that information. We do not want to know whether they are losing money or making money. We want to get the price of the coal. I do not care a rap whether we get the cost sheets or not. We want the price of that coal now and a year from now. That is the information we want, and let us bend our energies toward getting it. It is clear that this company does not want to supply that material. They have done everything they can to avoid giving it, and that may be their right and privilege, but we have a right to know what the price is.

The CHAIRMAN: I would suggest that we hear Mr. Guthrie. He is present and will address the Committee for the companies if the Committee desires. What is the wish of the Committee?

Mr. MAHARG: I see no use in hearing counsel. I made a suggestion the last day that we immediately summon a responsible official of these companies to come here and state what they would or would not do, so that we would know where we are at. Counsel cannot answer questions for the company. Mr. Chrysler was here the other day, and we are just as far behind as we were before he appeared.

The CHAIRMAN: Does the Committee desire to hear Mr. Guthrie?

Mr. ROSS: It cannot do any harm.

Mr. MCKENZIE: I have to appear in another place this morning, and I must retire, but before I leave I desire to say that I have no objection whatever to the Dominion Coal Company and the Nova Scotia Steel Company coming here and producing every shred of evidence they possess in regard to costs, provided other companies are treated in the same way. We passed a resolution to that effect, and if after I retire you pass a resolution to bring the Dominion Coal Company and the Nova Scotia Steel Company here I presume the same treatment will be meted out to others.

The CHAIRMAN: Do you want to hear Mr. Guthrie?

Mr. MAHARG: I have no objection, but we should take some action to get some responsible party connected with the company here.

Mr. COWAN: I have no objection to hearing Mr. Guthrie.

Mr. NORMAN GUTHRIE, K.C.: I have not much to say, except that when the witnesses are unfortunately unable to appear, owing to circumstances outlined in the telegrams it is necessary for someone to be here, I think, as a matter of courtesy to the Committee to make the proper excuse. This matter, from our point of view, was really not settled until last Friday, or practically until Saturday morning. I think I am correct in saying that when large corporations receive notice to produce what one might call unusual figures, it is necessary, in the interest of the shareholders of the company and others, to submit the question to counsel and see what their legal rights are. I was unfortunately not able to be present last Friday, and Mr. Chrysler was good enough to present the legal aspect of the case. I do not think

[Mr. Norman Guthrie.] •

the company can be accused of any discourtesy or contempt for the Committee in really placing what seemed to be its legal position before the Committee. The matter I understand was of such importance that the Committee did not undertake to decide it, but referred it to Parliamentary counsel; so that I assume there must have been some legal question as to whether the resolution constituting this Committee authorized the production of such information. Mr. Gisborne, I understand, on Saturday morning gave an opinion with which I personally probably would not agree, but nevertheless we are prepared to bow to his decision and accept it, and the Committee accepted it. But I would point out, in fairness to the companies in reference to this, that that was the only definite decision on the matter as to whether we were bound to produce the figures or not. That was followed immediately by a summons. Dr. Cowan moved a resolution and fixed to-day at 10.30 as the day of the return of the summons. Perhaps it was not considered by the Committee that the gentlemen who were being summoned lived in a remote part of the country, and that in Nova Scotia Sunday is a dies non and that principle is rigourously enforced, and telegrams are not delivered on Sunday. Mr. McDougall's wire indicates that he has not received the telegram as yet. I suggest, in fairness to these officers, that there should not be any suggestion that there is any bad faith. As soon as the matter was decided on Saturday the Committee took the appropriate action, and on behalf of the company I am prepared to say that they are entirely agreeable to bow to the will of the Committee. If the Committee wants the figures they will be produced. It is possible—and I do not wish to be misunderstood in this matter—that when they are produced we may ask that they shall be treated in a confidential way. I am sure it is not the desire of the Committee to place the company in a disadvantageous position by publishing broadcast highly confidential figures, and therefore I think, when they produce them, as they will, we will ask the Committee to treat them confidentially, and perhaps submit them to a sub-committee for consideration. My instructions from Mr. McDougall are that he will be here as soon as possible with the figures, will submit them to the Committee, and will in every respect meet the Committee, and bow to their decision, and I say that there is no possible intention to show any discourtesy or any contempt, and we deprecate very much any expressions being sent broadcast in regard to bad faith. We wish to be before the Committee in perfect good faith and to give them what it was finally decided on Saturday we ought to give them. All we ask is time to get this, and Mr. McDougall, at the meeting of the directors, will probably authorize the production of the figures. It was agreed on Saturday that was necessary and he will get the figures and be here. I would suggest, with great respect, that perhaps Saturday morning at 10.30 would give him ample time to be here. I am making that suggestion without any authority, but I think that will give ample time. I think in all fairness to the company the Committee should give us this length of time to be here and lay the figures before you.

Mr. KEEFER: I would suggest that we act on that suggestion, and fix Saturday morning, and in the meantime get ready to make our report on all other matters, and leave that part still in abeyance, and if there is any further testimony to be called, we will get it in at once.

Mr. COWAN: Do you move that it be fixed for Saturday morning?

Mr. KEEFER: Yes.

Mr. COWAN: I second that motion.

The CHAIRMAN: It is not a very good morning to meet.

Mr. KEEFER: Possibly Friday.

Mr. GUTHRIE: I wanted to suggest a day which would make it possible for him to be here. I do not want to have to appear again before the Committee.

Mr. KEEFER: Let it be Saturday.

[Mr. Norman Guthrie.]

The CHAIRMAN: We will make it convenient to attend that day. It is moved by Mr. Keefer, seconded by Mr. Cowan, that we arrange for hearing Mr. McDougall on Saturday morning.

Mr. COWAN: And that a wire be despatched to that effect.

Mr. GUTHRIE: I will wire him immediately.

The motion was carried.

Mr. KEEFER: It would be a good idea to clean up the question of whether you want to call any more witnesses.

The CHAIRMAN: Yes, I think that is important.

Mr. KEEFER: I would suggest that all the testimony relating to peat be considered better to be tendered before the Fuel Committee who are working specially on that problem, and are much more competent to deal with it than we are. That disposes of two or three witnesses.

Mr. COWAN: That affects Ontario particularly, and if Ontario is agreeable, it is satisfactory to me.

The CHAIRMAN: Could we not decide that we shall hear no further witnesses than have already been called?

Mr. KEEFER: You said there was somebody you would like to call.

The CHAIRMAN: No; I desire to call nobody. My feeling is that the Committee should hear no more witnesses, and that we should get our report ready.

Mr. KEEFER: There is only one witness that I think we ought to call before we close, and that is Mr. Teakle.

The CHAIRMAN: He has been called, and will appear as soon as convenient. Mr. Norcross has been called.

Mr. KEEFER: He has not given evidence.

The CHAIRMAN: No.

Mr. KEEFER: He is in the city to-day, and perhaps we could call him to-morrow. He will speak in regard to the supply of coal to his own Canadian Merchant Marine. He can tell you all about the question of transportation of coal from Nova Scotia to Montreal, and also the cost of transportation to the Lakes, and give all that information.

Mr. CHISHOLM: You can get all that in the report of the Committee upstairs. Mr. Teakle gave evidence the other day covering all these things.

Mr. COWAN: We should have it first hand.

Mr. CHISHOLM: He is well prepared for it.

The CHAIRMAN: My understanding from him was that he would not be able to appear to-morrow. It will probably be several days until he will be able to appear, as he does not know how long he will be detained before the Railway Committee, and he wants a little time to prepare.

Mr. MAHARG: I suggest that it be left in the hands of the Chairman to arrange.

Mr. CHISHOLM: What about the representation of the Western Mines?

Mr. DOUGLAS: In that connection, at the last meeting of the Committee I made an appeal from the decision of the Chairman, but I am not particularly desirous of going on with that matter of the appeal, but should occasion arise when it might be desired to have a reversal of the opinion, if it were possible by the Committee, I would desire to bring it up perhaps at a future time.

The CHAIRMAN: Mr. Douglas will remember, and every member of the Committee will recall, that a motion to adjourn the Committee was called before the appeal was taken up, and a motion to adjourn is always in order, and therefore the Committee adjourned without the appeal being disposed of.

Mr. CHISHOLM: When I was interrupted I was asking what was going to be done with respect to the Western coal mine operators. The whole matter is before the Committee. We passed a resolution the other day. I took the position that those men from the East should come here, but I say it is not fair to bring them from the East and leave the West alone. I want it to be clearly understood that I desire to see the representatives here.

Mr. COWAN: That is absolutely a good position. The only question is one of time.

Mr. CHISHOLM: You are prepared to stay till August.

Mr. COWAN: Yes, but the rest of you are not.

Mr. CHISHOLM: Who says so?

Mr. COWAN: My little willingness in the case does not enter into it. If you can get them here in time I quite agree with you, but I wish to correct the statement that this is the first company that has been asked to state their case. The Grand Trunk Pacific came here through Mr. Vaughan, and they told us they had a mine in operation, and they gave us the costs.

Mr. BLAIR: It was Mr. Kaye.

Mr. COWAN: He gave us the costs, and consequently this is not the first company which has been asked to tell the Committee what it costs to produce their coal.

Mr. DOUGLAS: And the Inverness Coal Company costs were given in detail.

The CHAIRMAN: There is nothing before the Committee.

Mr. KEEFER: What is the question about a ruling?

The CHAIRMAN: If there is a motion, let us get it before the Committee.

Mr. HOCKEN: Is there anything more to do to-day?

Mr. KEEFER: There is a motion before the Committee undisposed of which was interrupted by a motion to adjourn.

Mr. DOUGLAS: Will you read the motion by Mr. Cowan and the ruling by the Chair?

The CHAIRMAN: What business do you wish to bring before the Committee in connection with that?

Mr. DOUGLAS: Dr. Chisholm has raised the point that he is very desirous of having the Western Representatives here, and my motion was to the effect that two of the largest companies be called to produce their original cost sheets and practically in the same terms—I want to get it in identically the same terms as the resolution in regard to the Nova Scotia Steel and Coal, and the Dominion Coal, and I made that as a motion, if you remember, and it was seconded I think, by Dr. Cowan, and the ruling was that that motion was out of order, from which I afterwards entered an appeal, or stated that I desired to appeal from the ruling of the Chair, and now that the matter has been brought up by Dr. Chisholm, desiring to have this motion here, I feel exactly in the same position, that we should not take the costs sheets from representatives from the East exclusively. If there is any good purpose to be served, I think the western men should also be required to produce the original cost sheets. I recognize the difficulty, at the same time, of having them appear here within the limited time at the disposal of the Committee.

Mr. CHISHOLM: My information is that the head office is at Toronto.

The CHAIRMAN: Let Mr. Douglas finish his statement.

Mr. DOUGLAS: But with regard to appealing against the ruling of the Chair, I am very slow to do that, and I would prefer not to appeal.

The CHAIRMAN: Do you wish to deal with the appeal which you made yesterday? Is that what you desire?

Mr. DOUGLAS: Perhaps you would rule now, if a similar motion were made. There might be a slight change in the terms as to the western companies that should be required to come. If you would entertain such a motion as that, without appealing from your decision of yesterday, I would be glad to substitute it.

The CHAIRMAN: Let me get this clear. You have repeatedly referred to appealing from the Chairman's ruling on the original motion. Do you wish to press that before the Committee this morning? Why are you referring to the appeal which you made yesterday?

Mr. COWAN: Because you ruled the motion out of order.

The CHAIRMAN: You have referred several times to your appeal from my ruling.

Mr. DOUGLAS: Do you wish the Committee to deal with your appeal.

Mr. DOUGLAS: Right.

The CHAIRMAN: Do you wish the Committee to deal with your appeal?

Mr. DOUGLAS: Perhaps that would be the best way to dispose of it.

The CHAIRMAN: If it is necessary, I am prepared to deal with it. If an appeal is made against the ruling of the Chair, it must be dealt with immediately. It was not dealt with immediately on account of a motion for adjournment being moved and carried. Therefore, it is out of order to deal with it now. That disposes of the appeal question.

Mr. COWAN: Supposing it is correct, as Dr. Chisholm says, that some of these companies have their head offices in Toronto, it would be quite possible to call them if you are willing to let us call them. But you have ruled that we cannot call them. It would be convenient, and it could be done, and then we would be treating all parties fairly. But you ruled against it.

The CHAIRMAN: Is there anything before the Committee? Any motion?

Mr. COWAN: Will you entertain another motion?

The CHAIRMAN: I will entertain any motion which any member of the Committee makes.

Mr. COWAN: Then I would move what is practically the same motion, that the International Coal & Coke Company and Crows Nest Company be called. I move that these two companies be required to appear here with their cost sheets covering the period indicated in the motion dealing with the same matter in reference to the Nova Scotia companies.

Mr. DOUGLAS: I second that motion.

Discussion followed.

Mr. DOUGLAS: What were the minutes of yesterday's proceedings?

The Minutes of yesterday's proceedings having been read by the Clerk.

Mr. COWAN: I see that my motion was ruled out of order.

Mr. KEEFER: It does not follow from Mr. McKenzie's motion that all should be called.

Mr. COWAN: The ruling still stands. My idea is to issue a summons to the companies that can come here. There is no sense in issuing summonses to all the companies when they could not possibly get here in time. We must admit the principle laid down by Dr. Chisholm.

Mr. KEEFER: It does not follow that we have to call them all.

The CHAIRMAN: There is a motion before the Committee.

Mr. COWAN: I just want to get the names of the two companies that have their head offices in Toronto.

The CHAIRMAN: I would like to say for the information of the Committee, that, so far as the Chairman's rulings are concerned, they are made by the Chairman and not by Mr. Keefer.

Mr. KEEFER: There is no question about that; nobody doubts that. But we surely have a right to attend to our resolutions this morning.

The CHAIRMAN: Mr. Keefer is instructing the Committee as to what the rulings of the Chairman should be. The ruling shall be according to the judgment of the Chairman.

Mr. KEEFER: Quite right.

Mr. COWAN: I move, seconded by Mr. Douglas, that the auditors of the Hillcrest Coal Company, the Brazeau Collieries, Ltd., and the Rosedale Coal Company be summoned to appear before the Committee, bringing with them their original cost sheets from 1912 to date.

Mr. MAHARG: Is that motion definite enough? You remember the information that Mr. McKenzie gave us, that there was no use summoning an employee, as it were, of the company, that you want to summon a man in authority, and instruct him to do this.

Mr. COWAN: I am not a lawyer, and I cannot answer that point, but I want to summons someone who will bring the information. If that is not the right party, I will change it.

Mr. DOUGLAS: I do not think these companies are going to be so technical as the other companies. I think the companies in the east act foolishly, and not in their own interests, and I do not think the western companies would act so foolishly.

Mr. COWAN: Mr. Keefer suggests the secretary of the company, and I am prepared to change it.

Mr. DOUGLAS: If you remember the wording of our resolution, we instructed Mr. McDougall to cause so-and-so to attend with the book. It is only to get the matter cleared up. The secretary is only an employee of the company. I think I would take the president.

Mr. COWAN: I will insert the president.

The CHAIRMAN: The motion will read:—

“That the President of the Hillcrest Coal Company, and the Brazeau Collieries, Ltd., and the Rosedale Coal Company be summoned to appear before the Committee bringing with them their original costs sheets from 1912 to date.”

I must, to be consistent with my ruling yesterday, declare this motion out of order.

Mr. KEEFER: I appeal from the ruling of the Chair.

The CHAIRMAN: Then, shall the decision of the Chair be sustained.

A vote having been taken——

The CHAIRMAN: The decision of the Chair is not sustained. I feel very much like refusing to put this motion and to dis sever my connections with the Committee. I can only express my views that this is the most ridiculous motion I think I have ever seen brought before a Committee. In the closing days of the session we propose to call men from far distant Alberta to give evidence here—impossible to be accomplished. I do not like to impute motives, but I can see only one reason for pressing the motion to-day. The Committee cannot possibly hear this evidence before prorogation. The men are bound to come here at a cost of hundreds of dollars to the country; no purpose can be served, no purpose connected with the work of this Committee can be served, and why should the Committee persist in following this course. I state my objections in that way before putting the motion.

You have heard the motion. Is it the pleasure of the Committee to adopt this motion.

A vote having been taken——

The CHAIRMAN: The motion is carried.

Any further business before the Committee this morning?

Mr. HOCKEN: Mr Graham of Toronto is here, and he has not been subpoenaed at all. If the Committee has time I would like him to tell us what he knows about this process for preparing peat.

Mr. MAHARG: Was the suggestion made that that might be referred to the Peat Committee?

Mr. KEEFER: The question of peat is a scientific one, and a great deal of money has been spent experimenting on it, so far without results, except a sun-drying process. Therefore there is a special Committee dealing with this special appropriation, testing it and so forth. I think it is better for that matter to go to the peat Committee.

Mr. HOCKEN: I move that Mr. Graham be heard.

Mr. MAHARG: I second the motion.

The motion was carried.

JAMES GRAHAM, called, sworn and examined.

By the Chairman:

Q. What interest have you in connection with the peat industry?—A. My position is based on 16 years of more or less continuous experimental work in connection with peat. I claim to have a process by which the peat can be put on a successful commercial basis. I do not ask any person to accept my bald statement, but what I ask is that a Peat Committee of the best engineers in Canada be appointed. It is sufficiently important to justify that a Committee of the best engineers should pass upon this question before further public money be expended on experiments. The question is this: I claim that it has been conclusively proven, during 16 years of experiments in Canada, and more particularly during the past 11 years, that the sun-drying method, during the past three years, by the joint Committee in the matter of sun-drying, has been proved to be absolutely impracticable, under existing conditions in Canada; that we should have an investigation by a competent body of engineers; by competent I mean that the engineers must not be committed to any special process, or connected with any interest having patents to sell, or in any way directly or indirectly interested in the peat question, to be competent to apply the acid test to all the methods tried in the last few years. It will not take long, and I desire especially to test the methods tried out during the past eleven years. I would also ask that this Committee be required to make an estimate of what this fuel has cost up to date per ton as a business man, as a commercial engineer or an industrial engineer would estimate it, take in all the overhead charges, and make a report to the Government as to how much this fuel has cost up to date. The second proposition would be then to make, in comparison, an examination of what I have got to show of what I have done, the relative value, the comparative value of the fuel I propose to make, which is carbonized peat briquettes really on a small scale, compared to that which is now being carried on to a large extent in carbonizing lignite, peat being similar to lignite or even a lower grade in quality. I claim the raw sun-dried peat is absolutely worthless for Canadian service. For instance take galvanized peat, I claim it will be proved conclusively if any person investigates, that the man who has burned this coal during the last few years has found that it is worthless as a heating system in Canada. That being the case, it is then admitted by those who advocate or are responsible for the

[Mr James Graham.]

sun-drying method which is being carried on, that it is absolutely useless for the furnace, which is the universal heating system in Canada, and is only usable for a grate or range, and of course with the present price of fuel, that would be an extravagant method of heating. So that we want a fuel to take the place of hard coal for domestic purposes. I saw in the paper the other day a statement by Mr. Anrep, who is responsible for that, that three tons of sun-dried peat equals two tons of anthracite coal. No engineer in Canada would endorse that statement, because all fuel values are tested by the Calorific test, which will show sun-dried peat as 6,000 B.T.U. to 6,500 B.T.U. for the best quality. Mr. Nystrom, representative of the Dominion Government, confirms that statement. Now we all know that hard coal is 13,000 to 14,000 B.T.U. How can you make out that three tons of that is going to equal two tons of hard coal. I have got a sample here of the carbonized briquettes, if anybody wants to look at it. The calorific test shows it is a perfect substitute for hard coal, and has 12,000 B.T.U. compared with an average of 13,000 for hard coal, and 6,000 to 6,500 for sun-dried peat. I have a statement here in my pocket which I need not read, but it covers the whole situation. It is a large question, as some of you gentlemen remarked here. I have a brief statement here showing the main features of the proposition and what it means. I have an estimate here of the kind of plant I would propose to erect to deal with the bog at Alfred, where the Government has been experimenting for eleven years. That bog contains enough raw material to make about 3,500,000 tons of carbonized briquettes, and I would propose to select about 2,500 acres. The total area was 6,000 acres; take about 2,500 acres of it in the centre of the bog and put in a plant to turn out 120,000 tons per annum per season, about 260 days, which can be done with an equipment costing, according to a statement I have here, based on the estimates of competent engineers, and my own experimental work, the total amount of apparatus for that would cost in round figures \$800,000. It would require about ninety hands to operate, three eight hour shifts, allowing 20 per cent on the capital investment, which would be \$160,000, and \$90,000 for wages; that is about \$4 a day for the average labourer—most plants are eight hour day. Then there would be thirty thousand dollars for incidental expenses, and the total cost of the 120,000 tons would be \$280,000. That would amount to \$2.35 a ton. That is excluding the by-products. Now, as Mr. Ross remarked the other day in the discussion on lignites, in carbonizing lignite—and the same would apply to peat—there are valuable by-products which can be obtained, the profits on which according to my estimate would amount to \$100,000 a year. Take sulphate of ammonia, we can get from \$50 to \$60 a ton, and there would be 2,000 tons in such a plant as I have mentioned. There would be 12,000 tons of tar worth \$8 a ton. Taking those by-products, and applying the profits of say \$100,000 would make the net cost of the fuel \$1.40 a ton.

By Mr. Keefer:

Q. That is delivered at the plant?—A. F. O. B. at the plant.

Q. That would be in its raw state at the plant?—A. The equipment is practically on the edge of the bog and the quantity of material treated would yield a net output of 460 tons a day. The quantity of wet peat treated daily to make that would be about 8,000 tons, reckoned at 88 per cent water. About 80 per cent of the water is extracted with the presses. It is a very simple engineering problem, and you must have the right system for de-hydrating peat? My proposal is to take the wet peat direct from the bog to the plant and convert it into what is practically an artificial in 24 hours; instead of waiting all summer to dry it down to 25 per cent to 35 per cent as is the case with the sun-drying process. An important objection to the latter is that the consumer is not only paying freight and delivery charges on a low grade fuel, but he is paying for the transportation of 200 tons of water in 800 tons of fuel. This quantity of fuel would produce about the same amount of heat as 460 tons of car-

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bonized peat, and would cost on an average \$2,400 for freight and delivery compared with \$1,350 for 460 tons of my fuel. That is how it would compare with the system by which you could convert all the peat at once into a coal fuel, and not a mixture of water and low grade fuel.

By Mr. Keefer:

Q. Your process is a commercial proposition which I should think you should bring before the Peat Committee?—A. That is an important point, but I would like to say a few other things before taking that up. I wanted to compare this proposition. It would not be advisable to take the Peat Committee's estimate. They have a way of their own of estimating costs. Here is the way that this proposition of mine would compare.

Q. The point is this, the details of the problem are not for us to consider?—A. I was just going to say a few words about them.

Q. If you have a process for the commercial handling of peat so that it can be sold in competition with coal, it ought to be taken up before the Research Department of this Government or by the Peat Committee to investigate it in the same way as they are doing with the briquetting of lignites?—A. I will tell you what would happen if it was brought before the Peat Committee. This Peat Committee was appointed about three years ago, and Mr. Gibson, one of the Deputy Ministers of the Ontario Government requested me to allow him to come here from Toronto and appear before that Committee. I came here to lay the matter before it. It was the second meeting of the Committee. I came here, and Mr. Roland Harris of Toronto was one of the members of the Committee. I knew it would be useless to go for personal reasons, because one of the other members happened to be a particular enemy of mine, B. F. Haamel, a personal enemy of mine, and one of the other members of the Committee seemed to have no interest in the process. I naturally would not expect that he would recommend my rival proposition, through a third party with Mr. Harris on the evening that I arrived here to attend this meeting three years ago. He made an appointment through a third party to meet me at the Chateau on the following morning.

MR. KEEFER: We do not want all these details. Give us the result.

WITNESS: When I arrived on the scene, I had a letter from Mr. Gibson, suggesting that my proposition be laid before the Committee, but I was told it would be useless to have my proposition submitted, that the Peat Committee were not going to consider it. I did not ask him for any explanation. He said it would be useless. I said that I had come here on the recommendation and request of Mr. Gibson, the deputy minister, who requested me to lay the matter before the Chairman, but Mr. Harris said there was no chairman. Then I said I would go to the secretary, and he said there was no secretary. Finally he said it would not be considered.

By Mr. Keefer:

Q. Is your process patented?—A. No, it is not patented.

Q. If you desire to patent it you would not want to give any details.—A. I have no objection. It will take too long to give the details here, but I have no objection to give details before competent parties.

Q. Is it practically the same process as that of treating lignite?—A. It is a different process entirely.

Q. You can understand that this Committee cannot deal with the details, but would be very glad to bring you into touch with those connected with the Government's service who can make some investigation and report upon your process. What do you suggest?—A. Get a committee of competent persons, a committee of the best

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engineers in the Dominion of Canada. I can nominate two or three men qualified to act on that committee. There are Professor MacLennan, of Toronto, and Dr. Ruttan. These are eminent men. Then there is Mr. H. H. Vaughan, one of the leading engineers of Canada. These are men that I could recommend.

Q. Is Professor MacLennan familiar with your process?—A. He knows something about it. At the first meeting of the Research Committee he asked that an investigation be taken up of my process, but Dr. Haanel blocked the scheme. Professor MacLennan would be glad to tell you what he knows. I am merely suggesting a few names. What I want to get is a fair test.

Q. Is Dr. Ruttan familiar with your process?—A. Dr. Ruttan also recommended it to the Research Committee.

Q. Is he familiar with it?—A. He has looked into it to a certain extent at the request of Mr. Vaughan of the Dominion Bridge Company. Here is another proposition that I would make in regard to having this process investigated by a committee. I would suggest a committee of the best business men in the Dominion and of the best engineers, who have investigated what has been done under other methods, and what has been done by my experiments, and propose to the Government, or rather have the Government propose to the committee, after investigating all the different methods and making a comparison of their merits, that this committee of business men undertake the development of the industry. In other words, instead of having this Peat Committee, which will never accomplish anything at all before the end of time, get a committee of business men to investigate it and have them put up half of the money. I will undertake to get those business men if the Government would be willing to put up half of the money. Some members of the Dominion Bridge Company have offered to assist in developing this process. The proposition I would suggest to the Government would be this: Get a committee of business men who would have such faith and understanding and confidence in the thing as to provide one half of the money required to demonstrate the best method that can be found in this country or any other country. So far as my method is concerned, I would propose a preliminary test or demonstration which could be carried out at a cost of \$5,000. I may say that Mr. Drury of the Provincial Government has already offered to provide that amount of money, \$5,000, for the test which would prove the basic principles of the process. The second step would be to build full-sized machines. The \$5,000 would only cover a small apparatus. The second step would be to provide a set of full-sized machines to test and prove the capacity. That set of machines would cost about \$40,000. The first test would prove the basic principles, and the second would prove the capacity of the entire plant, because in the list of machines there are a large number of units. From ten to thirty units would be in a large plant.

By Mr. Maharg:

Q. Is that machinery now in existence?—A. No, because it would cost \$800,000 to put it into existence. If it were in existence I would not be here.

By Mr. Hocken:

Q. The experimental plant would cost \$40,000?—A. I have got past the experimental stage, but a demonstration test could be carried out at a cost of \$5,000, which the Ontario Government have already promised me. The second step would be to get \$40,000 for these full-size machines. After that, it would only be necessary to have duplicates.

By Mr. Maharg:

Q. It is the \$40,000 I am speaking of, not the \$800,000. Is the machinery for the \$40,000 plant in existence?—A. No.

[Mr. James Graham.]

Q. It is in your mind?—A. All I have had so far is models. I have had models which I built and tested for several years—at least a number of years. The \$40,000 plant will prove conclusively the cost of the plant and the capacity, and the cost and the capacity will determine the cost of the fuel. Now, giving an idea of what might be expected, I may say this is only a question of so many units. I have enumerated the quantity of machinery required as based on experimental tests I have carried out, and others have carried out on my behalf, extending over several years, and assuming the estimates are now approximately correct, here is how this would compare with what we have done during the years we have been carrying out tests with Alfred. It would require, if the Alfred plant was based on the best up-to-date records of the Government plant, taking the official record, to equal the output of this plant, 120,000 tons of carbonized peat would require 240,000 or 250,000 tons of sun-dried peat. To produce 250,000 tons of sundried peat we would have to duplicate the present plant fifty times, because the gross output was 5,000 tons. The investment of capital that they have at the present time in Alfred, according to your official statement, is \$73,000. That \$73,000 would have to be developed fifty times, which would mean three and a half millions as compared with eight hundred thousand. We have thirty-five hands to operate that dinky little plant for turning out 5,000 tons in a year. That would have to be duplicated, and the number of hands multiplied fifty times, which would mean 1,700 hands required as compared with 90 hands to operate my plant. That is about how the comparison would be in the matter of cost. You can glean from that about what the comparison of cost would be. What were supposed to be official statements were handed out from time to time. The other main feature I want to emphasize is this: that after this thing has been demonstrated for years, and advertised from the Atlantic to the Pacific like a circus, there is not a business man in Canada who would invest five cents to develop it commercially. That is evident from the fact that it is advertised all over the country, and nobody takes any interest. Senator M. J. O'Brien did undertake to see what he could do in the thing at Farnham, Quebec. He dropped about \$40,000, after three years of persistent effort, and gave it up. The whole apparatus was abandoned, scrapped and sold for taxes. That is a sample of what happened, and later on the Government gave the plant to Mr. Shuttleworth, of Brantford. He tried it for one year, and that was enough.

Q. What do you want us to do?—A. Do not refer this thing, for heavens sake, to the Peat Committee. There are four men on that Committee, and three of them are personal deadly enemies of mine.

The CHAIRMAN: This Committee cannot refer it to anybody.

WITNESS: You might make the recommendation. What I want is to get the truth of the peat question, and you only get the truth out by referring it to a committee of competent engineers. That is what I want to be done.

Mr. MAHARG: I think we have your idea pretty well.

The Committee adjourned.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

FRIDAY, May 20, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada, met at 10.30 a.m., the Vice-Chairman, Mr. Cowan, presiding.

R. B. TEAKLE, called, sworn and examined.

By the Acting Chairman:

Q. I understand, Mr. Teakle, that most of your experience has been in ocean shipping?—A. My experience in the transportation business has always been ocean—deep sea, I am not an inland man, although I have certain information along that line.

Q. What official position do you hold?—A. I am operating manager of the Canadian Government Merchant Marine.

Q. Have you a statement prepared?—A. No, sir, because this call came to me, as it were, out of a blue sky.

By Mr. Keefer:

Q. The problem this Committee is working on is fuel, and the transportation of that fuel is necessarily involved therein. The first point we want to get at is what would be a reasonable cost per ton, long or short—I care not which—for transporting coal from the Cape Breton Ocean Ports to Montreal. They were doing it before the war. During the war the vessels were commandeered and business disorganized, and I would like to get some idea as to what your opinion on that point is, as to the cost of transporting coal at a reasonable price giving a fair profit to the ships, to Montreal.—A. I have never handled coal cargoes from Sydney to Montreal, but I have some friends in the business and they tell me they are getting to-day a dollar to a dollars and seventy-five cents per ton. That is about what it is worth in Montreal to-day; whether that pays their ships or not, I do not know.

Q. We have had it in evidence that before the war they were doing it for sixty cents.—A. Well, I would like to qualify that statement by saying that I would not agree with your figure, but I can understand it would be less, due to the fact that operating costs were a good deal less than they are to-day; those are coming down.

Q. Do you know what the rate would be under normal conditions, if before the war it was sixty or eighty or ninety cents, do you think we should come back in time to that figure?—A. I think if you can get your working conditions down to the same basis, you could come back to that in time, Mr. Keefer.

Q. You have nothing to do practically in the way of inland navigation?—A. No.

Q. Do you know whether or not a ship which did not have to break bulk at Montreal could not reasonably be expected to carry the coal up to Ontario ports at a cheaper rate than if they had to break bulk?—A. That would be my personal opinion; keep her moving right along; delays count.

Q. If they were able to get up there—A. As I told you Thursday, when I had the pleasure of seeing you, provided the facilities are there, which will enable the ships to sail, there is nothing, in my judgment, to prevent her going right in.

Q. On the Welland canal we are putting the locks down to thirty feet on the sill and twenty-five feet in the channel. Could that depth of water—I have had it looked into and I have found that over eighty per cent of the vessel tonnage of the

ocean could float in the water.—A. That is my opinion. I have not checked up the figures, but I should say that with the modern ships that would carry vessels with a ten thousand ton cargo.

Q. Do you happen to know that we are taking to-day on the Upper Lakes, from Lake Erie to Port Arthur coal from eight to ten thousand tons cargoes? Do you happen to be aware of that?—A. I know there is a lot moved around, but just what cargoes I do not know.

Q. In boats like the *Grant-Morden*?—A. She carries wheat too?

Q. Yes. These boats have to break bulk at the Welland canal at the present time, and it takes too many ships with a fourteen-foot-six draft to bring that cargo to Montreal.—A. I understand those boats that come down through the canal carrying grain lift out one hundred and seventy-five thousand bushels on a fourteen feet draft. Now the *Grant-Morden*—

Q. What is that?—A. One hundred and seventy-five thousand bushels.

Q. You are away too much. They could not carry one hundred thousand, on a fourteen-foot-six.—A. I was talking to Mr. Aird the other day—why, we can only carry fifty-three thousand, but we have ocean built ships. You see, their ships are different to ours. Our ships have square bottoms, bluff bow and stern, they are nothing but boxes, with the engines aft.

Q. No boat can go through the Welland canal with a cargo of a hundred thousand bushels.

The ACTING CHAIRMAN: That is, through the Welland?

WITNESS: That is fourteen feet?

By Mr. Keefer:

Q. Fourteen-foot-six.—A. I had just forgotten that; I have a memorandum of that.

Q. It takes four or five vessels to bring this cargo down to Montreal from Port Colborne, be it coal or be it wheat; that necessarily increases the cost between Ontario ports and Montreal?—A. Yes.

Q. How much—roughly?—A. I would not like to say, because I do not know what the ships are costing to operate.

Q. We have it in evidence that the present rate from Lake Erie ports to Montreal is two dollars to two dollars and twenty-five cents per ton on account of the small boats. Do you happen to know that the rate to the head of the lakes is only forty or fifty cents a ton?—A. I do not know that.

Q. It would be a great advantage to the coal trade, would it not, if ocean carriers could get up to points like Toronto and Hamilton and other places?—A. That would be my judgment.

Q. And I suppose, as a salt-water man, you know that the ships will hang on to a cargo as long as they can?—A. Absolutely.

Q. They do not like to let go of it.—A. As long as they can get the earnings out of it.

Q. Do you happen to be familiar with the Manchester ship canal?—A. I have never had the pleasure of seeing it, but the trade goes through there.

Q. They built a canal thirty-five miles long with five locks?—A. Yes.

Q. Manchester is the third largest port.—A. It is the coming port.

Q. And salt-water ships go up that distance to get that business?—A. Yes.

Q. What would you say as to the advantage of doing the same thing on the Great Lakes?—A. The same thing, provided there are the earnings.

Q. It would materially cheapen the cost of transportation by water?—A. I would think so.

Q. Is there any reason why, in your judgment, if it was worked out and endeavours be brought to pass, we should not be taking the western products of the prairie country

[Mr. R. B. Teakle.]

in bulk down to the ocean ports, be it Montreal, or be it Nova Scotia, and take the Nova Scotia coal back, and make that a regular business just as is being done to-day from Lake Erie ports, Buffalo, and so forth, and Cleveland to the head of Lake Superior.—A. To load ship from Fort William, go down to Montreal and then load back home with coal?

Q. Yes.—A. there is nothing I can see to prevent it, provided the facilities are there.

Q. Providing you have the facilities?—A. Yes.

Q. If that were done, would this not be the result: That the ocean tramp ship in coming to Cape Breton ports would benefit in two ways, they would get her bunker coal and her cargo?—A. That is what I think would happen. Say that everything was equal; there is a cargo of grain waiting at Fort William for Liverpool and the owner wants to ship out, he would naturally try to get a cargo of coal at Sydney for delivery up the lakes as close to the point where he is getting the grain as he possibly can. I think, Mr. Keefer, I can answer your question, if I may be so bold, by saying this: The first thing to do is to make it possible for the ships to sail with safety; have your facilities so she can be promptly handled—time counts. I may be wrong—I think I am only a young man yet—but in my judgment, it is feasible. The cost is another proposition. I have not had time to figure this out, because there is the question of insurance, and the question of wages, and the question of operating to be considered. Those questions I am not familiar with at the moment.

Q. The cost of handling bulk freight, like wheat, coal, or iron ore, as against package freight, is much different in and out of ships?—A. Yes.

Q. Give us some ratio or idea of the difference?—A. It would be pretty hard. I would want to get figures from home, which I have not got.

Q. One is mechanical loading and unloading?—A. Yes.

Q. And the other is handling it by hand?—A. Grain, in my judgment, is the quickest traffic handled. Then would come coal, and iron ore—I have never handled iron ore, but would judge it is the same thing.

By the Acting Chairman:

Q. Are the ships of the Canadian Government Merchant Marine suitable for handling coal up the St. Lawrence?—A. We would carry coal, yes, but our ships are more designed as freight boats. We could carry coal, but they would not be as economical as coal carriers, as ships constructed for that business.

Q. Have you any idea of the extra cost per ton which would be involved on account of the present condition of those ships—the manner in which they are built?—A. This proposition is something new to me.

Q. What would be her cost of trimming?—A. I think we could load almost as quickly. We might be a little slower in discharging. What that would be to-day, I have no figures to work on. I think there would be some difference against us.

Q. But it is not a fatal difference?—A. I do not think so to-day.

By Mr. Douglas (Cape Breton):

Q. It would not be twice as great?—A. No, I do not think so. As you understand, our ships come in more of a curve at the bottom, whereas if I were going into the proposition, such as Mr. Keefer has suggested, I think I would try to get a specially designed ship to do away with the trimming, so it would pour in.

By Mr. Keefer:

Q. That is what has happened for the last fifteen years. They have been adapting the ships to conditions?—A. Absolutely.

Q. And as conditions change, they would probably have a type of ship for those changed conditions.—A. Yes.

[Mr. R. B. Teakle.]

By the Acting Chairman:

Q. I wanted to find out what the Canadian Government Merchant Marine might do now?—A. If we had the facilities to bring the ships up and down through the locks—if we could go up and down the canal, if the canals were properly built both for length and depth, there is nothing to it; we could carry a cargo of coal. I would not say we could carry it in competition, because there is our cost of operation to be considered.

Q. But my point is this, as regards the present situation between the Cape Breton mines or the Nova Scotia mines and Montreal. It is quite evident from evidence given here that Montreal might be a large market for Nova Scotia coal, or Cape Breton coal, and that not so much coal is being consumed there as might be. The question is as to whether or not your Canadian Government Merchant Marine could be used satisfactorily to get into the coal trade, and try to assist in the development of that business and at the same time assist Montreal by getting that coal, if your ships could do that.—A. At the present time, all our ships are engaged in other business. We have six in business between Sydney and Lévis, carrying coal for the National Railways. The other ships are employed in what is called "off shore work," that is, going to India and Australia, and ports of the United Kingdom, and South America.

Q. How long have they been on that particular work between Sydney and Lévis?—A. We took over three, the *Drummond*, the *Sheba*, and the *McKee*. I do not know how long they have been in that trade. We have put three of our boats built up at Collingwood, the *Canadian Signaller*, the *Canadian Warrior*, and the *Canadian Recruit*. They are open hold ships, open fore and aft. The railways wanted this extra coal and so we put these six boats on.

By Mr. Douglas:

Q. None of these are 'tween-decks?—A. No. We selected these old boats for that reason.

Q. Nor are the three you first mentioned, the *Drummond*, *McKee* and the *Sheba*?—A. No, the *Drummond* and *McKee* are lake type boats, that is, machinery aft.

By the Chairman:

Q. Evidently there is a contract between the Canadian National and the coal company? Is it sufficient to keep these boats busy between now and the time navigation closes?—A. I suppose it is.

Q. The six of them?—A. Yes.

By Mr. Keefer:

Q. How long since that came to pass?—A. We started those boats in the work about—let me see, I was in Toronto—to-day is Friday—a week ago Monday.

Q. Since this Committee has been in session?—A. Yes, Mr. Keefer.

By the Acting Chairman:

Q. This was the contract that was not going to be started until next August?—A. I do not know the details of that. I have orders to put on six ships, and I did it, and we will square it with the railway.

By Mr. Douglas:

Q. It is being done under an agreement with the railway?—A. Yes.

Q. That arrangement is not with the coal company?—A. No.

Q. You do not know the coal company in this at all?—A. No.

MR. KEEFER: You will pardon me, Mr. Teakle, if I do not stay. I have some very important work to attend to this morning, and you have answered all my questions very satisfactorily.

[Mr. R. B. Teakle.]

WITNESS: Not at all, Mr. Keefer. In fact, I would like to say to the Committee that if I can be of any assistance in any way or at any time, I shall be only too glad to do what I can, or to answer such questions as I am able.

By the Acting Chairman:

Q. I personally have a desire, and I think it is the desire of everybody on this Committee to figure out the way to get busy on a scheme for assisting the development of the coal trade, as between Nova Scotia and such points on the St. Lawrence as your boats can reach. Can you give us any information of what it would cost you to deliver your coal at various points? I suppose you cannot give us off-hand what the costs are?—A. No; I never worked on that at all. We never worked on any of the inland business at all. We have been concerned more with taking care of the overseas trade. As a matter of fact, we have not had the ships to put in the business to-day. We have no ships we could put in the coal business. We have fifty-five ships, but they are all busy.

By Mr. Douglas:

Q. Are the three you named—

The ACTING CHAIRMAN: He named six.

Mr. DOUGLAS: Yes —

The WITNESS: I think you are meaning the ones built under our building programme. There are only three of those.

By Mr. Douglas:

Q. You had three with the word "Canadian" attached to them, as well as the *McKee*, *Sheba* and *Drummond*, I think they were the *Canadian Warrior*, and so forth.—A. Yes.

Q. Have you any others besides those three that are 'tween-decks?—A. Yes, we have some other ships.

Q. How many of those have you got?—A. We have got four. I think when we get the full fleet we will have six.

Q. What would be the tonnage of those?—A. Those boats cannot carry much more than, I should say, three thousand tons.

Q. Three thousand tons?—A. Yes, three thousand tons.

Q. The objection made by the coal companies to using the boats of the Canadian Government Merchant Marine was mainly on account of the decks?—A. Of the which?

Q. The decks. On that account. That is what I wanted to know, what would be available?—A. We could carry coal, but whether we could carry it as economically as the *Kamouraska*, or the *Lignan*, of the Dominion Coal Company, I cannot say.

By the Acting Chairman:

Q. They are built for the trade?—A. Yes.

Q. I understand there are several ships of the Canadian Government Merchant Marine which are not completed?—A. As far as I can make out, we will have the whole fleet in our hands by September 15. Take that boat in Toronto—I was there the other day—she is too far gone, you could not alter her at all. Then the rest of the fleet; I do not remember offhand, but the majority of the boats to come out are our big boats and we want those for overseas service.

Q. The situation is this: Nova Scotia has got good coal, evidently the very best of coal, of a bituminous nature. Montreal needs this coal, Montreal and all that district is now importing it from the United States, and they are sending millions of dollars over to the United States, thus increasing the adverse exchange against us. I can quite understand that sentiment is not supposed to govern your company,

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but we do want something done to build up the trade between Nova Scotia and the rest of Canada. Is there anything that your company can do, that you see, to assist in the development of that business, from a national point of view, I have no particular interest down there; my interests are all in the West, but I am Canadian enough to want to assist as far as I can the development of any part of Canada.—A. Well, at the moment our fleet is fully employed in other business. The only ships we have got are those six employed with the railways, and it is my understanding they will be employed all summer with the railways, to bring up the railway coal. Those are little ships. It is a question whether we can get a living earning to make the ships pay. I do not know that we could get freight rates sufficient to pay us.

Q. I am certainly very glad to hear you say your ships are all employed. We have been told in the House that a great bulk of them are tied up.—A. I would like to know who said that. We have fifty-five ships to-day. The *Canadian Recruit* is in Halifax waiting for a new cylinder which was broken on her last trip from the West Indies. That was no fault of ours. Every other ship is working. They may not be actually sailing, they may be in some port receiving cargo or discharging cargo. We have one ship bringing down a load of grain from Port Arthur to Montreal, and then she goes into the regular trade, and makes a trip to the other side. So everything is working, and it certainly distresses me when I hear people say that we have a lot of boats tied up. We have one of the finest staffs of men—and I am not speaking of myself—but we have got one of the finest staffs of men that we know of anywhere. We have capable and efficient officers, and those fellows work just as though it was their own company. I come into that office in Montreal morning and nights, Sundays and Mondays and if the fellows have the work they are working, and it is certainly distressful to see these reports. It looks as if we did not give a “damn.” You are going to discourage the men. You know it is so easy to discourage men, and so hard to encourage them. I said to the Railway Committee downstairs the other day, when they were examining me, that I would back my staff against any one in Canada. We have done a lot in two years—an awful lot in two years, and I am not ashamed of it. I am mighty proud to work as hard as I do for the service.

Q. I am mighty pleased to hear that statement.—A. There is nothing that looks “Government” about it; people will come into our office in Montreal and come into my room, and I make it a point that anybody who wants to see me can do so unless, for instance, some of you gentlemen, or some other gentleman were there in conference with me, when I would not see them, as it would not be courteous to you gentlemen, but everybody can see me if they want to. The same is true of the men in the office, and if you did that, you would soon see how much work it is to keep in commission fifty-five steamers. We put the fifty-five steamers into commission; we have put their crews aboard, found masters, officers, engineers and men; we have a shore organization, that is to say, we have the office to take care of it, we have our dock organization, we do our own stevedoring and discharging and loading, we have our own repair shops where we do our repairing outside of the dry dock work. We have our stores department, where we buy in quantities and serve it out to the various ships at a price, so that every ship gets the best possible figure, and every ship is being run as economically as we can run her to-day. We have competent men. Our marine superintendent is a Yarmouth man. He served in the old Yarmouth ships, that is Mr. Tedford—you must know him, Mr. Douglas—and his assistant is a fellow named Hatfield—you must know that crowd down there, Mr. Douglas?

Mr. DOUGLAS: Yes, I know them.

WITNESS: We have our superintendent of engineers. He is a British subject, but has lived in Canada long enough to be a Canadian, he comes from the Shetland Islands, and has spent his life on the seas, so right through we have a competent staff all through the piece, and I am not ashamed to have anybody come into the office

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at one end and go out the other, and if he can find anything that can be improved upon, I will take my hat off to him. Of course, we have made mistakes in the past two years, just the same as everybody has, and we had a very severe part to play to get the ships running. Personally, I have been in the office for the first six months at seven o'clock in the morning, and stayed until midnight, Sundays and Mondays.

By Mr. Douglas:

Q. There is one criticism that I hear, and that is that there is not a very large proportion—an overwhelming proportion of Canadians on your boats?—A. I made the statement the other day downstairs that our officers and engineers are sixty per cent Canadians. I figured it out before I made up the report. In regard to the sailors—the rank and file—you cannot pick them out. They are here to-day and God knows where to-morrow. The same with the firemen. But what we try to do is to get Canadians; if not, then chaps born in the British Empire, and as a last resort, you may have to pick foreigners; you cannot always help yourself, but the idea is to get Canadians first, and then British subjects, whether they come from Malta or the West Indies, or any place else, as long as they are British subjects, and owe allegiance to the King, then I do not care.

The ACTING CHAIRMAN: That is good policy. Have you any further questions to ask, Mr. Douglas? If not, Mr. Teakle, then I can simply say that I hope your company will pay particular attention to this coal business, and if you find you can assist us that you will take it in hand.

WITNESS: I will be glad to take that angle into consideration and see what we can do.

The ACTING CHAIRMAN: It seems to me such an utter absurdity that we have to import coal from the United States and pay out millions of dollars, when we have good coal in our own country.

WITNESS: That is quite right.

By Mr. Douglas:

Q. Just one more question. What discharging plants have you in Montreal?—A. We have none there, but as you know, there is the Dominion Coal, the Canadian Import and the Century Coal up on the harbour, near Windmill point. Down below, here is the Dominion Coal, the old plant of Hochelaga. I think that is working now.

Q. Those are the only discharging plants there?—A. The only permanent plants. Then they have the barges—grain barges, but I presume that this coal would come up to some of these dealers, and they would discharge the ship.

Q. What I had particular reference to was this: That in the course of the taking of evidence, one of the questions to which consideration was asked, and to which some attention was devoted, was the discharging of a large quantity of coal at Montreal, and from Montreal to be taken by rail to Toronto?—A. Yes.

Q. Using one of the trunk lines for the purpose as a coal road?—A. Yes. Was there a feeling that the facilities were inadequate?

Q. I was going to ask you—A. I beg your pardon.

Q.—what suggestion you would make; whether the Canadian Government Merchant Marine should have proper discharging facilities, and what the value of making that possible is, in co-operation with the railways?—A. That would be something that would have to be considered, Mr. Douglas. That is a very important question and a very large question that you have asked, and it would be necessary to think that out, and also to find out where you could get a position for the plant.

Q. You do not see any very great difficulties, assuming that coal could be taken to Toronto? First, there is the carrying charge to Montreal, then the discharging

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charge in Montreal to the car, and of course the freight rate to Toronto, and there is also a stocking charge for a period of time in Montreal. Assuming that all those things could be done at a reasonable price, you do not see any particular difficulties?—A. I do not. It is not impracticable. It is a question of revenue, Mr. Douglas; whether you can make the thing pay. That is my judgment to-day. What I mean by that is this: Suppose you can get a plant, and then you put your equipment in it—there is an outlay of money. You would have to get a return on that to come out on the right side, because you cannot show a loss on one end or the other. Now, as to whether or not the Canadian Government Merchant Marine would undertake that is a point upon which I am not positive. That would be for the president to say, whether they would go into such a thing—that would be a matter which is entirely in his hands. It is a question of the policy of the line. I would rather you gentlemen, in matters of that kind, which refer to policy, would refer it to the president. That is something that would have to be submitted to him. I would like to make my answers on the basis of an operating man as to what may or may not be done; whether it would be economical, or whether expensive. Beyond that, I cannot go. The policy is directed by the president and his Board of Directors.

Q. I suppose there is very good co-operation between the Canadian Government Merchant Marine and the Canadian Government Railways as to business?—A. Oh, yes; I refer to it as “the same body with the two arms.” We work as close together as we can, and as I stated downstairs, I consider that we are an important adjunct one to the other. I still say that. It is very important that the National Railways should have a merchant fleet, and it is very important that the merchant fleet should have a National Railway, and it makes a wonderful combination for Canada, and the people of Canada, outside of you gentlemen, do not appreciate what you have got.

The ACTING CHAIRMAN: I do.

WITNESS: I said “outside of you gentlemen.”

The ACTING CHAIRMAN: I was positively shocked when I heard in the House the other day that these vessels were all tied up.

Mr. DOUGLAS: I received a letter the other day from Buenos Ayres in which it referred to the ships of the Canadian Government Merchant Marine being tied up on account of it being impossible to get the business, and suggesting that there might be a coal trade developed between Buenos Ayres and this country.

WITNESS: That is right.

Mr. DOUGLAS: As a result of the publicity which that item received, that information was given in the House that the ships were tied up, it is unfortunate—

WITNESS: Quite.

Mr. DOUGLAS:—that misstatements are made against any line of business, it goes very far.

WITNESS: There is no denying the fact that some of these ships were in Halifax and St. John longer than we liked, but they were under repairs, and when the market was so poor rather than sail the ships when we could not get full cargoes to fill them, we so worked our ships as to clean up our contracts, give the connections to the country, and yet curtail our expenses, and while that was doing, we overhauled our ships; we gave them the annual overhauling, so as to keep the ships up. By overhauling the ships every three or four year, painting them, and fixing them up, you lengthen their life. We took occasion to do that when things were quiet, and then when things started to straighten out, we had the ships moving. We were ready for it. You might say it was a little good foresight.

The ACTING CHAIRMAN: It looks like good policy to me.

WITNESS: That is what I said last winter. If you take the experiment made on the *Empress of France*—if it is the big passenger boat, it may take you two months

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to overhaul her; if it is something else that is laid up, she may slip a voyage, but she can be overhauled. He have to dry dock our ships once a year; the regulations in Canada demand that, but sometimes we put them up twice a year, and they are painted and cleaned, and so on, and if you do that in times of depression, and keep connections between Canada and the outside trade by letting other boats call at two ports, I cannot help but think that is good business, yet you have one or two or three or four ships in Halifax; I have yet to be told that it is not good business to make your repairs during the time of depression.

The ACTING CHAIRMAN: I do not know very much about shipping, but the whole thing sounds sensible, and I am quite ready to accept it.

WITNESS: The gentleman there is quite right about cleaning a boat. A clean bottom increases her speed, put dirt on a ship's bottom and you will lose one-half to one knot in speed, and burn the same amount of coal.

The ACTING CHAIRMAN: Thank you, Mr. Teakle. We have a letter to-day from the Hillcrest Collieries, Limited, of Montreal. You will remember that we asked them to appear before this Committee on Wednesday, and we received the following letter this morning:

"We hereby acknowledge receipt of your wire summoning us to appear at 10.30 a.m. Wednesday morning, May 25, before the Fuel Committee, and will accordingly arrange to be present.

Yours very truly,

(Signed) J. M. MACKIE,

Managing Director."

Shall we now adjourn until Wednesday?

The Committee adjourned to the call of the Chair.

HOUSE OF COMMONS,

COMMITTEE ROOM 425 .

WEDNESDAY, May 25, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. M. Steele, presiding.

The CHAIRMAN: I would like to read to the Committee a letter I received from Mr. R. C. Vaughan, Vice-President, Canadian National Railways, in reply to some statement made by one of the witnesses representing the Canadian Pacific Railway, Mr. Thomas Britt. He wishes to clear up one or two points. The letter reads as follows:—

“Dear Sir,—

“I have just had an opportunity of reading to-day on the way West, for the first time, the evidence given before your Committee by Mr. Thos. Britt, General Fuel Agent, Eastern lines of the Canadian Pacific Railway. I observe that Mr. Britt states in his evidence on a number of occasions that he felt he would be taking a risk in ordering coal by rail from mines on the Canadian National Railways on account of the possibility of confiscation. I cannot believe that Mr. Britt was serious in these statements. It is true that two or three years ago at a time when everybody was having difficulty getting a sufficient quantity of coal, that the Canadian Pacific Railway went down and purchased coal from mines that I understand they had never received tonnage from before, and offered a considerably higher price than anyone was paying in the vicinity. The Intercolonial Railway were short of coal that year and I understand it was necessary for them to confiscate something in the neighbourhood of 5,000 tons of coal for which settlement was made in due course.

“It should be borne in mind, however, by the Committee that this was caused by the exigencies of the war, and under normal conditions it would not be necessary to confiscate coal.

“During the war, and in fact last year, hundreds of cars of coal consigned to us from United States mines were confiscated by United States railroads, but in normal times this does not happen.

“I would like further to point out that both Mr. Britt and Mr. Price stated the only way they could use coal at Montreal would be by water and that they would not in any event move coal by rail from Nova Scotia mines except perhaps such as they might use in New Brunswick, which as stated by Mr. Britt would not amount to more than 100,000 tons, and I do not think that coal has ever been confiscated, in fact I think Mr. Britt stated they also took that coal by water from Sydney to St. John.

“I felt I should make the situation clear to your Committee, as under ordinary conditions no coal would be confiscated, and only in this one particular case did the Intercolonial Railway confiscate coal belonging to the Canadian Pacific Railway.

“Yours truly,

“R. C. VAUGHAN,

“Vice-President.”

Mr. McKENZIE: I would like to re-call Mr. Hudson for the purpose of asking him a little further in regard to the by-products of coke. I move, seconded by Mr. Chisholm, that he be re-called.

Motion agreed to.

JOSEPH G. F. HUDSON recalled and examined.

By Mr. McKenzie:

Q. Would you be good enough to put on record your knowledge of what you have learned from the authorities as to the by-products from coal in the process of making coke? I think I saw you with a three-year table. I would not expect you to be able to reproduce it from memory.—A. No. Mr. McKenzie had that upstairs in Dr. Steele's room. I think the by-products from coke making now are equal to about 250 different products. These are figured out by the chemical and by-product companies who are operating very largely through the coke gases coming back. In Sydney we are only getting a very few of those by-products, because they are not following them out. I think at Sydney we are getting seven by-products. I am speaking from memory. They are toluene, benzol, solvent naphtha, ammonia liquors, sulphate of ammonia, and one or two other by-products which are coming in from that.

Q. Tar of course is a by-product?—A. Yes, of the coke ovens.

Q. And coal tar?—A. Yes.

Q. Did you mention ammonia?—A. Yes, ammonia product.

By Mr. Chisholm:

Q. What do they use as a substitute for gasolene?—A. They are calling that motor fuel now. It is a difference in stripping between toluene and benzol.

By Mr. McKenzie:

Q. Is that a by-product of coke?—A. Yes.

Q. Could you name from memory the by-products of coal that you regard as of special commercial value?—A. Well, they are all of commercial value. What is done at the present time is that in a great many of the cities, and I suppose at the present time Philadelphia is leading, they are putting up by-products plants, taking the slack coal from the mines, and making that into coke, and selling that to houses for cooking, and they are taking these by-products down to a certain extent. They are principally now taking the gas of the coke and the ammonia liquors and the tar, and getting the sulphate of ammonia; that is they are using the gas for cooking in the cities, the coke for domestic fuel, the tar for their street pavings, and sulphate of ammonia for the intensive gardening which also necessarily grows up round the cities and is used for the garden products.

By Mr. Cowan:

Q. Fertilizing?—A. Yes, in that way.

Q. That is really one of the most important things?—A. Yes.

Q. It is very very essential?—A. Yes, they are getting that through the sulphate of ammonia in that way.

By Mr. MacKenzie:

Q. What I want to get at is this: Is it not a fact that the utilization of those commercial elements that you get out of a ton of coal necessarily would have the effect, or would it not have the effect of reducing the price of the article, cheapening the price of the real article that we are after? That is if you get all those other elements, capture them so to speak, and commercialize them, would you not be able to sell your

[Mr. J. Hudson.]

coke cheaper than if you were making coke alone?—A. Very much so. In answer to that, if you will allow me to say so, very few places now, except in certain districts, where they only use the old beehive oven where coke is made alone, all the present coke ovens are by-products ovens, situated in large cities, so that the product can be utilized for the purpose you have mentioned, or situated close to smelting works, like the Dominion Iron and Steel Company, where the coke is used, and they use the gasses in the by-products as well.

Q. Would you have any suggestion to make as to any policy that you think either the Government or the coal owners could follow in connection with the production of coke, and also of the production of by-products which you have mentioned, and which can be obtained from the coke? What would you suggest about it, in view of the necessity of something to take the place of anthracite in this country?—A. That was taken up very fully in the Fuel Controller's official report, taken up by Mr. Lucas, the Superintendent of the coke oven department of the Dominion Iron and Steel Company, and also Mr. Blauvelt, one of the foremost gas engineers in the United States, and both of those are included in the final report of Mr. McGrath, the Fuel Controller.

Q. It is not before this Committee?—A. It is not before this Committee in this way, but it is the latest thing we have on that subject, by two very well known men in that industry, who have made it a very special study, and are very well known in the whole industrial world, not only in one place, but all over.

Q. Could you from memory, very briefly, state what their suggestions were? I have not read them?—A. Well the suggestion is that cities of a certain size should establish coke plants close in the vicinity and that the coke that they would get from those by-products ovens would be equal in heat value to anthracite, and ordinarily speaking, from a ton of slack coal, which would be the cheapest raw coal produced, or that you would be able to produce, you would get eight to ten thousand cubic feet of commercial gas, cooking gas, and from twelve to thirteen hundred pounds of coke, about ten gallons of tar, and from two to three pounds of sulphate of ammonia from one ton of coal in that state, and that these ovens would give the gas to the cities for cooking purposes, and coke for the replacing of anthracite. I do not know just what that would cost. The ovens are very expensive at the present time.

By Mr. Cowan:

Q. Have you any idea what population would be necessary to make that commercially possible?—A. I think Mr. Lucas has been basing his calculations on cities from fifty to one hundred thousand populations, and then one hundred and fifty to two hundred thousand, in that range, according to the number of population, as to the quantity of gas that would be used per capita or per householder. Those are pretty elaborate calculations to go into, because they follow the cost of production and that kind of thing.

By the Chairman:

Q. Where cheap electricity was available that would interfere with the sale of the gas?—A. No, I do not think so.

By Mr. Ross:

Q. You would be just using the gas for cooking in that case?—A. Yes. Nothing very much beyond that.

Mr. McKENZIE: I may say that I was not quite fair to Mr. Hudson, because I did not tell him I was going to call him.

By Mr. Douglas:

Q. The Dominion Iron and Steel Corporation have by-products from plants?—A. Yes.

[Mr. J. Hudson.]

Q. Do they produce ammonia?—A. They are producing seven by-products I think at the present time; they can produce benzol, coluol, solvent naphtha, ammonia liquor; the tars of course come out you see, and sulphate of ammonia, and ammonia liquor. I think that is what they are producing now.

Q. From a ton of coal can you give me any idea as to what quantity would be obtained of each?—A. No, I cannot, from a ton of coal. Of course that depends how the ovens are running. It is taken in the volume. For instance the last battery of ovens the Dominion Iron and Steel Company put up, I think there were 120 in one battery. That gas is taken off as tar gas and other gas as the coal is burned in the oven, but I cannot tell you. I have not the table to give you that.

Q. Would this be a fair statement to make, that for every ton of coal used by the Dominion Steel Company, they get half the value of the ton out of the by-products?—A. I do not think I can answer that quite in that form, Mr. Douglas, because they are using the whole of the tar. They sell some tar, but they use a great deal of tar in the heating of the open hearth, and this other is going in the same way to themselves, so that I do not know what they sell, you see. I do not suppose they charge themselves with the gas. I think they do charge themselves a very small amount for the gas; that is the gas they use from the ovens, from the coke of course. I would not be able to answer that question satisfactorily, I do not think.

Q. It is quite safe to say they derive considerably from it?—A. Oh, yes, that is one of the features of the trade at the present time.

By Mr. McKenzie:

Q. As a practical coal man, which would you think the better way to produce the manufacture of coal into its various element at the coal mine or at a certain place such as Montreal or Ottawa?—A. Of course you would have to take the product of the mine as you were using it. The product of coke is a very difficult thing to handle. I think the freight rates on coke are a third more than ordinary coal on account of the bulk in transportation; so that you have to bring the coal to the cities.

Q. If the coal were brought to Montreal, Ottawa or Toronto, those large centres, then the process of making coke and producing those other various by-products could better be done in that way than transporting the coke after it was made?—A. Oh, undoubtedly, no question about that, and you would get the gas as well.

By Mr. Cowan:

Q. As to these by-products that can be profitably manufactured out of our coal, do you know whether there is a large quantity imported into Canada?—A. No, I am not sure of that. There is a by-product plant at Sydney, and another at Sault Ste. Marie where they have the by-products there, but I do not know just what the volume of importation is.

Q. You do not know whether they are equal to supplying the Canadian demand at the present time?—A. No, that would need some investigation.

By Mr. McKenzie:

Q. One thing you are sure of is that as to the gas and the coke, there is plenty of room for them?—A. Yes, no question about that.

By the Chairman:

Q. You might have to qualify that statement, might you not? I spoke of electricity a few moments ago. Now in many cities of Ontario I think it was found that electricity was cheaper than the gas which they have at the present time at least?—A. Yes.

[Mr. J. Hudson.]

Q. For cooking purposes?—A. Yes. The gas is very high at the present time in Ottawa; I think it is over \$1.30 a thousand cubic feet, and that is heavy. A great many people have gone in for the electric cooking stoves, but the installation of these stoves is very heavy—the wiring cost is heavy.

Q. So it would depend largely on the price at which they would sell the gas as to the value of the by-products?—A. Yes, as against the value of the electrical heat that could be obtained. They are making gas very, very cheaply. I am speaking from memory but I think Mr. Lucas in his statement said they could manufacture gas in this way and deliver it for something like 35 cents per thousand cubic feet, that is when coal is at a certain price.

It is rather hard at the present time to make any statement as to the relative value of this, or as to the commercial value and the price value, because things have changed; that report was made by Mr. Lucas to the Fuel Controller just a little over two years ago, about two years and a half ago.

The CHAIRMAN: Does the Committee desire to ask any further questions?

By Mr. McKenzie:

Q. I desire to show that after we have collected and abstracted all those by-products we would be able to compete with our coal as against the anthracite man, and could sell cheaper than we could if we were only getting coke itself?—A. Oh, I think so, of course that is a matter that would have to be gone into very very carefully by both construction engineers and gas engineers in order to answer that question.

Q. The president of the Ottawa Gas Company who gave evidence to this Committee the other day said they were able to sell their coke below the anthracite price?—A. Oh, yes, I think there is no question about that. I thought the evidence given by Mr. Dion was very fair.

Q. He said they were selling at from one dollar to one dollar and a half cheaper than anthracite?—A. Yes. I know some people who use coke altogether in Ottawa.

Q. What I meant was, if he can do that by abstracting only gas and tar (those are the two things I think he mentioned) then a man who was getting all the by-products available from coke could still further cheapen his coke?—A. I think so.

By Mr. Ross:

Q. Suppose you are shipping your soft coal to some point in London, Ontario, and these large ovens are established there, would the amount of money they would get out of the by-products be sufficient to counterbalance the freight?—A. I think so. That whole question has received attention both in England and in the United States at the present time, and in the United States the production of by-product coke in that connection has been very very materially advanced, and cities like Philadelphia are taking that question up now, and I think Hamilton has gone into that to a certain extent.

Q. Of course they are very near the coal mines?—A. Yes.

Q. I just wondered if you had figured it on that point?—A. No. Except that you can get slack coal to make the coke from at a cheaper rate than the run-of-mine, or screen coal.

Q. Does Mr. Lucas deal with that point at all in the report you have mentioned?—A. Yes.

Q. The Value of the by-products as against the freight from Nova Scotia?—A. Yes, he made a statement on that basis.

By Mr. Douglas:

Q. I suppose you consider Mr. Lucas one of the greatest experts in Canada?—A. There is no question he has had more experience than any one else in Canada. He is now an Efficiency Engineer, but he started with those ovens and is a very very good man.

Witness retired.

[Mr. J. Hudson.]

The CHAIRMAN: We have present today, I understand, Mr. MacDougall from the Nova Scotia Steel and Coal Company and also representatives of some of the western coal companies who were called to appear before the Committee. What is the desire of the Committee as to the order in which these gentlemen should be heard?

Mr. COWAN: I suggest that they be called in the order in which they were asked to appear. The Nova Scotia Steel & Coal Company were the first.

The CHAIRMAN: They were all called, of course, to appear here today. Is it the desire of the Committee that Mr. MacDougall be heard first?

Mr. McKENZIE: I suggest that they all deposit their papers with the Committee before they give evidence. My position, and I think the position of the Committee, is, if one is to be examined they should all be examined, and, speaking for myself, I want to have some assurance that they are all to be examined before we make a start at all.

The CHAIRMAN: Of course we will have to call them in order to enable them to lay their papers before the Committee.

Mr. McKENZIE: Can you tell the Committee from memory, Mr. Chairman, the different parties who were called.

The CHAIRMAN: Mr. MacDougall, president of the Nova Scotia Steel & Coal Company, the president of the Hillcrest Collieries, the president of the Rosedale Coal Company, the president of the Brazeau Collieries.

Mr. ROSS: Are they all here?

The CHAIRMAN: I am not sure of that. The representative of the Hillcrest Collieries is here.

Mr. ANDREW HAYDON: I am representing the Rosedale Mining Company, Limited, and the Brazeau Collieries, only in the capacity of solicitor. Mr. Thompson, the president of the Rosedale Coal Company is here, and he is also one of the directors of the Brazeau Company. If I may respectfully submit and finish.

The CHAIRMAN: Just a moment. If the Committee will now decide the order in which they wish to deal with to-day's business, then we can get on more systematically. Is it the desire of the Committee that Mr. MacDougall be first called?

Mr. COWAN: I move to that effect.

Mr. McKENZIE: What I said before is this, that, from the beginning, everybody on this Committee believed that all the coal companies should be dealt with on exactly the same footing so that there would be no comments one way or the other. Suppose you begin with the Dominion Coal Company and they expose their figures, and some of the others are not prepared to go on? That is not in line with our ideas. We think if one is to be examined, they should all be examined. As a condition precedent, the Committee should know exactly what the Committee has got, what material they have to put before the Committee, and I think we should not begin to examine the witnesses before we have investigated the material of the four or five parties we are to call.

Mr. COWAN: I submit, Mr. Chairman, that in many courts in this country they would not hold up the proceedings because one of a number of witnesses in a case was not ready to be examined. If witnesses are not ready when we call them, we can go on and deal with them later on.

Mr. DOUGLAS: The position we would be putting ourselves in is this—we have to call someone first and I think it would be an absurd position to take by any witness, to say: "I do not want to give evidence, because I do not know what some other witness is going to say." To do that would be ridiculous.

Mr. McKENZIE: I think that the analogy attempted to be drawn between a string of witnesses in a single case is a very ridiculous analogy. Here are competing coal companies selling their products on the market in competition with foreign

countries, and we have no opportunity of calling those foreign companies here. So far as the western and eastern coal mines are concerned, in the great centres of consumption their successful competitors are the Americans. We have not asked any of them to come here or even to give us a statement, now we are proceeding to-day to show our hand to our American competitors, and we are making our coal producers in Canada, both East and West, show our American competitors exactly what our figures are and everything that we are doing. That, as I understand it, is not business, but I think it would be still worse if we take some one of those Canadian companies and make them show their figures, to the exclusion of the others who are competing with them in the same market. I am perfectly satisfied, that they will all show their figures if that is the will of the Committee, but I am not satisfied that the western companies shall show their figures and the companies from the east shall not, I want them all to file their sheets here, and then they can be examined as they have been brought. To say that there is a comparison between a number of witnesses in a case in a court of law and witnesses brought here is absolutely absurd.

Mr. ROSS: I think we should know before we start whether these companies are prepared to submit their figures. I would ask that Mr. Haydon be heard.

The CHAIRMAN: Under the circumstances, I think Mr. Ross' suggestion is a good one, that we hear what these different companies are prepared, from their points of view, to lay before the Committee to-day.

Mr. ROSS: I move that Mr. Haydon be heard.

Mr. CHISHOLM: I second the motion.

The CHAIRMAN: It is moved by Mr. Ross, seconded by Mr. Chisholm, that Mr. Haydon be heard.

Motion agreed to.

The CHAIRMAN: Mr. Haydon, you appear only as counsel?

Mr. HAYDON: Yes, for the Rosedale Mining Company, Limited, and the Brazeau Collieries, Limited.

Mr. MCKENZIE: Those companies are situated where?

Mr. HAYDON: The Rosedale Company is operating around Drumheller, and the Brazeau Collieries are operating at Nordegg, west of Red Deer, in the Province of Alberta. I have only to say, with all respect, that it has been impossible to have the statements of these companies ready for to-day. Mr. Thompson is here and would be ready to make what general statements can be made, but it has been physically impossible to get from the mine the information this Committee would ask to have. The directors are asking, and I am asking for these companies the privilege of one week more time in order to enable them to prepare their statements and estimates that this Committee might expect to have.

Mr. COWAN: Does the company raise any objection at all to submitting their cost sheets to this Committee?

Mr. HAYDON: No, sir.

Mr. COWAN: Are you prepared to submit these cost sheets, if you have time to do it?

Mr. HAYDON: I desire to answer the honourable member's question in this way: It would be unfair that the company's cost sheets should be presented to the view of competitors within and outside of Canada, but the company is willing to submit privately to the Chairman and members of this Committee, but not for publication, statements of their situation. You can readily appreciate that it would be simply offering information gathered with diligence and care through difficult times to our competitors. Privately and personally the information can be submitted, and an

effort will be made to have it fully placed before you, but we ask the privilege, if that is to be done, to do it privately, and so that you will have an opportunity of personally considering it, I think that is all I have to say.

The CHAIRMAN: Does any member of the Committee wish to ask Mr. Haydon any questions? Do you wish to hear the representative of the Hillcrest collieries?

Mr. ROSS: The Rosedale and Brazeau people have not had as long to get their information as the eastern people. You cannot expect them to accomplish impossibilities.

The CHAIRMAN: The first message that was sent is dated May 17. That, as you will remember, did not state the date on which the Committee wished these companies to appear.

Mr. COWAN: That is eight days since the first notice was sent to them.

The CHAIRMAN: On May 19 a further message was sent to each of these companies to this effect:—

“You are hereby summoned and required to appear before the Fuel Committee in the House of Commons at 10.30 a.m. on Wednesday, May 25, 1921, in Room No. 425.”

Mr. DOUGLAS: There is a representative of another western company here.

The CHAIRMAN: Mr. Mackie is the gentleman's name. Do you wish Mr. Mackie sworn?

Mr. CHISHOLM: Is Mr. Mackie counsel?

The CHAIRMAN: We will hear a statement from Mr. Mackie.

JOHN MACKIE called and examined.

WITNESS: In response to your telegram, Mr. Chairman, I came to Ottawa and brought with me the annual statements, the complete statements of our operations. They are printed annually, and appear in the press, and I have brought copies with me. We keep no books in our offices in Montreal; they are all kept at the mines. It would take some time to assemble the information, if the interpretation of your message must be taken word for word, that is, to give a complete detail of costs covering period of nine years. That is a laborious job. The net results as prepared by our auditors I have with me, and I am quite willing that you should have them.

By the Chairman:

Q. The request of the Committee was that you bring with you your original cost sheets from 1912 to date.

By Mr. Douglas:

Q. Those are kept at your offices out West, I suppose?—A. Yes. The original cost sheets are made up of wage, insurance, interest, depreciation, depletion, and so forth, and they are not made up by us in the form of a sheet from day to day or month to month, but are assembled by our auditors at the termination of our year and are embodied in our audited annual statement. The original cost sheets are only partial cost sheets from day to day. Do I make myself clear?

The CHAIRMAN: You do to me, Mr. Mackie.

By Mr. Mackenzie:

Q. Whatever those sheets are, you have not got them?—A. In so far as we have it assembled, I have them. That is, in our auditors' statement, which I have here and which I am quite willing that you should have, I have them. With regard to all the items that go into that, the auditors make them up at the end of the year in bulk.

[Mr. J. Mackie.]

By Mr. Douglas:

Q. You do not mean to say you do not keep a daily cost of the production of your coal?—A. Only as far as labour goes.

Q. And material?—A. Yes, and material.

Q. And what else?—A. Well, material goes in by the month; it does not go in by the day. Labour goes in by the day, and material goes in by the month. Everything else goes in by the year. In coal mining we have a business different from anything else, for this reason, that if we have no operations for a month our overhead charges go on just the same, and there is no production to charge that to. We do not make any stock as does an ordinary factory that carries the overhead right through. We cannot afford to store coal. The unloading and loading again, and loss from shrinkage—we could not live and do that. We must load on the cars for shipment at once.

Q. What is your daily production?—A. Our daily production is also a very varying quantity. Our maximum is about fifteen hundred tons per day. Our average this year is probably between seven hundred and eight hundred tons. We unfortunately show a deficit this year. It is a very fluctuating business, and the cost sheets, unless gone into as our auditors go into them, would not be comprehensive at any one period. Only at the end of the year are they comprehensive.

Q. They would be pretty comprehensive if we had them from the year 1912 down to the present date?—A. Yes, I have them here.

Q. That is the auditors' statement?—A. Yes.

Q. But not the cost sheets?—A. No, those are all kept at the mines.

Q. But you have no objection to the Committee having them?—A. The cost sheets?

Q. At the mines?—A. I think, with the other gentleman who spoke beforehand that the cost sheets should not be given to the public or to our competitors particularly. I do not object to the public knowing so much as our competitors. We are under Government Control and have been for some years.

By Mr. Cowanz

Q. That is in Alberta?—A. Yes, we pay the wages we are ordered to pay by the Government controller. We are paying to the ordinary track-man who has none of the risk of the mine, 82½ cents an hour.

By Mr. Douglas:

Q. How much?—A. Eighty-two and a half cents an hour for ordinary labour.

Q. Common labour?—A. Yes; that is where the cost is.

By Mr. Ross:

Q. Do you mean that is the wage you pay to the lowest man in the scale?—A. Yes, I think we paid a miner as high as \$4.200 last year.

By Mr. Cowan:

Q. That is, the aggregate wage for the year was \$4,200?—A. Yes.

Q. That is what you call a contract man?—A. Yes, he is paid by the ton.

By Mr. Douglas:

Q. Would he be running a machine?—A. No, we are not allowed to use machines on our mines. The Union dictates to us in that respect.

By the Chairman:

Q. With regard to these cost sheets you have at the mine, in order that we may have it here before the Committee, I would infer from your statement that they give only some of the costs, that they are not complete statements of your costs of producing coal?—A. Quite right; the summary is not made up until the end of the year.

[Mr. J. Mackie.]

Q. So that if we had those before us, of what value would they be to the Committee in assisting us to determine what your costs are?—A. I think they might be very misleading, they would give wages and would give material as distributed through the mine, but they would not give the whole costs.

Q. So that if the Committee is desirous of securing accurate information as to the real costs of producing the coal, the cost sheets would not be the documents we require?—A. They would not be all the truth; it would be giving partial evidence and not whole evidence.

By Mr. Douglas:

Q. Would they not be pretty complete evidence as to the cost of production, but not complete evidence as to the cost of distribution and selling, and so on?—A. No, everything is the cost of production. The cost of selling is not a big item with us. We sell largely to the railways,

By Mr. Chisholm:

Q. You dump it from the cars and there is no middle handling at all?—A. No middle handling at all. We sign up with the railways; that is our principle production.

By Mr. Douglas:

Q. I think, Mr. Mackie, you could leave your statements with the Chairman, and we can have a chance to examine them and perhaps call you this afternoon.

MR. McKENZIE: What is the original resolution?

WITNESS: May I say this further in answer to your question, that being under Government Control, they sent out an auditor, and undertook that the figures of competitive mines in the district would not be disclosed, and I think this Committee should do the same thing. I think we should have the assurance that in disclosing the figures to them they will not be disclosed to our competitors. We are competing very keenly among ourselves as well as with the Americans. When the eight months' strike occurred in 1911 we lost to the Americans a market that we have never regained. It is over ten years now since we lost that business. It gave the Washington mines, the mines across the line from us, such a boost that we have never regained the market. We used to feel that was a natural market for our products. We have lost it, and I do not know that we will ever get it back, because our wages are boosted. We are under the control of the United Mineworkers of America, and I think they look after their own family first, and I think our wages are put up unduly from time to time. I think it is unfortunate for the Canadians living in the west, and I also think it is unfortunate internationally, or nationally, as the products of our mines are not finding the broad market they should find. I blame the propaganda of labour as organized by the United Mineworkers of America for the unfortunate position that a great many of our mines in the west are placed. As far as our immediate district is concerned, only half the mines are operating to-day in our district that were operating 10 years ago when I went there; the others have gone to the wall; that is a deplorable state of affairs.

MR. COWAN: Yes, but I am afraid that the witness has not dealt with one point of this situation at all. He tells us he is paying 82½ cents an hour for labour. He spoke of one miner earning \$4,200 in a year. Another point made was that the union will not allow them to use certain machinery. That undoubtedly raises the price of coal. It might be all due to what you say. The people in Western Canada believe the companies are profiteering, and you cannot make them believe anything else. We want the actual facts. The people of Regina will tell you the companies are charging an enormous profit, and I fancy the same thing happened in Nova Scotia, and I think if you take this Committee into your confidence, instead of trying to keep the information from us, you will be doing yourself a service.

WITNESS: My dear sir—

[Mr. J. Mackie.]

By Mr. Cowan:

Q. We have been up against that for the last month?—A. I must raise that question right off because we are here to serve this Committee in every way we possibly can.

Q. The statement that you are paying \$4,200 a year to men is a revelation to me. I have been here six weeks on this question, and never got the information till this morning?—A. That is not general. We paid up to that figure.

Q. The sooner this company take the Canadian public into their confidence, just so much sooner will they be well off. Public sentiment is against you to-day, and I think largely improperly so?

By Mr. Chisholm:

Q. That is the highest wage you pay?—A. Yes.

Q. What is the average wage you pay?—

The CHAIRMAN: Are we going into an examination of Mr. Mackie on this phase? If so let it be understood. We called him to make a statement to the Committee regarding the production of the cost sheets. He has made it. Do you wish to go any further?

Mr. ROSS: I think we examined Mr. MacDougall in a general way as a witness, and I do not see why we should not examine Mr. Mackie in that way and get what information he has and deal with the cost sheets later on. He has a lot of information that would be of use to this Committee, and I think we should get it from him.

The CHAIRMAN: I have no objection. The Committee decided to hear the statement as to the production of the cost sheets. The witness is open for examination. The Committee decided we should not swear this witness because he was merely making a statement. Do you wish him sworn as the ordinary witness?

Mr. COWAN: I think we had better have the witness sworn.

JOHN M. MACKIE, called, sworn and examined.

By the Chairman:

Q. You are an officer of the Hillcrest mine?—A. Managing director.

Q. How long have you held that position?—A. About 10 years.

Q. Where are your properties located?—A. On the Crow's Nest Pass Branch of the C. P. R. in southern Alberta.

Q. How long have you been operating?—A. Ten years.

By Mr. Cowan:

Q. In regard to that machinery that you say the unions will not permit you to use, why do they object to it, upon what ground?—A. I do not know that I could answer that. If I answered it it would be by hearsay. They are generally averse to automatic machinery.

Q. Do they claim it is dangerous in those mines?—A. Oh, no.

Q. If you were permitted to use it, could you reduce the cost of production?—A. I believe we could.

Q. To whom did you say you sold the most of your coal?—A. To the railways.

Q. Which railways?—A. Any railways that would buy it. It is a steam coal. We have a steam coal, a bituminous coal.

Q. On what line of the railway is it located?—A. The C. P. R.. We sell largely to the C. P. R. We have sold to the Spokane International and to the O. W. R. and N., but as I have said before we have lost the business of the O. W. R. and N., and the Spokane International. We cannot compete.

[Mr. J. Mackie.]

Q. That is, the price has gone up so high in your district that you cannot compete with them?—A. Relative to the rate prevailing in Washington.

By Mr. Ross:

Q. Do you mean the rate has increased in your district relative to Washington so that you cannot compete with them?—A. No, not entirely so.

Q. What other factors enter into it?—A. The big factor in that trade was what occurred in 1911 when our men were kept out of work for eight months approximately. A mine cannot stay idle without costing the company a very considerable sum, and the impetus given to the Washington mines placed them on their feet in such a way that we have never been able to catch up with them. We lost the market and lost our position as head of the class, if you like to put it that way. You take a boy out of school eight months and put him back, and he has a hard row to hoe to catch up.

By Mr. Ross:

Q. His education is interrupted?—A. Yes, and depreciation goes on throughout your entire workings, so that the question of strikes is a question that adds very very materially to our costs. The depreciation that goes on while you are idle is quite an item.

Q. Did they have no strikes in Washington at the same time?—A. Yes, they have a strike there just now. They are very clever. You never see an American strike with perhaps one exception—that was the Homestead strike—you never see an American strike very long. They say "Here now, we are going to lose our position in this market, we have to get to work"; whereas I feel strongly that our mines were kept out of work in 1911 deliberately.

Q. By whom?—A. By the union.

Q. Was that an American union?—A. An American union.

Q. Do you mean it was to injure you, as compared with their mines on the other side, when you say deliberately?—A. I do not know who was responsible for it, but I think it was propaganda. They came into the Regina market and we took years to get our Regina market back, which was one of our big centres.

Q. You think it was a propaganda to injure you and help them?—A. No, I do not think they did it to injure us, but I think they were so selfish in their own interests that they could afford to overlook our interests in southern Alberta.

Q. Does that arise from the fact that it was an American union?—A. Inasmuch as the American union was responsible for the strike, I cannot see that we should put the blame any other place.

By Mr. Cowan:

Q. Are you not aware that the people of Western Canada believe the coal companies out there are charging an exorbitant profit?—A. I am not aware of it.

Q. It is a pretty general opinion.—A. I doubt that very much.

Q. I live there and know pretty well what the people are saying.—A. What are they basing it on?

Q. The enormous price, and they do not know what you have told us this morning, that you are paying such enormous salaries; they know nothing about it.—A. If the Fuel Committee does nothing more than disclose to the people of Canada that we are paying ordinary labour 82½ cents an hour, they will have accomplished a good work, and the people of Western Canada will know where to put the blame for the high cost of coal.

Q. Then when they come along and see what enormous profits you are making, what can we say?—A. Well, as to that we can disclose it—

[Mr. J. Mackie.]

Q. I do not want to take a position against labour or against the country, but I want to know what the truth is, and I do not know how I can be in a position to know unless I know what profits they are making, and I am not averse to them making good profit—a reasonable profit—not at all?—A. Here is our auditors' statement for the period requested, from 1912 to the end—

By the Chairman:

Q. I think you made a statement regarding the disposition of this and the use to be made by the Committee of it?—A. Yes. I think that this Committee would be acting in the best interests of all concerned if they would decide to keep within themselves all the data as to costs that come out in this investigation, and I ask that they shall do so.

By Mr. Douglas:

Q. But not as to the rate of wages you pay?—A. As to the rate of wages we pay, that is public property, and as to the price we charge for our coal, that is public property. These two items are public property.

The CHAIRMAN: What is the desire of the Committee regarding this request?

Mr. COWAN: I would like the ruling of the Chairman as to whether a public inquiry can receive documents to be held privately? Can we receive evidence en camera, so to speak? Is it within our province?

The WITNESS: I am filing these for the use of the Committee.

The CHAIRMAN: I must confess that I am not prepared at the moment to give a ruling on that point. I have great doubts as to the expediency of the Committee receiving any evidence, or receiving any information in a private way. As to whether we have power to do so or not, I confess I am not in a position to give a ruling at the present time.

Q. In regard to those statements, these are the annual statements?—A. Yes.

Q. They are generally available to any person interested?—A. Yes.

Q. Not much difficulty getting an annual statement?—A. No.

Q. Usually they are published in the press after your annual meeting?—A. Quite right.

Q. In that case there would certainly be no objection to this part of the proceedings being made public?—A. So far as these go, no.

Q. There is no objection as to these?—A. No. I request that these things should not be made public, because I think if ours are brought before the press and before the public, all of our competitors should be in the same boat, that theirs should be called for too. I do not know what our competitors are making, although I suppose if I were to ask them for a copy of their annual statement I might get it, but what you say is quite true, I do not think they know what our figures are, and I do not know what our competitors' figures are right in our own district, and I think if we are going to file anything in connection with the statements here, that we should only do what they all do.

By Mr. Douglas:

Q. I do not understand that any company would be averse to filing a financial statement, because under the law, they are required to do it, are they not?—A. My dear sir, we are not averse to filing it; we are filing it with the request not to be made public.

Mr. McKENZIE: I hope there will be no mistake or mixing up of our position. We passed a resolution asking for certain papers. I trust there will be no misunderstanding as to taking something else as a substitute for that.

The CHAIRMAN: I think the Committee at the beginning of to-day's session decided we would hear the representatives of each of the companies called to appear

[Mr. J. Mackie.]

before us to-day, that such representatives should make to the Committee a statement regarding the summons so to speak, of the Committee. Now, after we heard from two companies and were about to hear from the third, then the Committee immediately decides we shall proceed to examine the present witness as a witness, before hearing from the fourth company. But we have not before the Committee now a statement of each of the companies. I think if we had followed the original policy of getting a statement from each of the companies and then decided what our policy regarding the companies would be, it would be better. In addition to that, Mr. Mackie has stated his willingness to leave a number of copies of the annual report with the Committee, but does not wish them to go into the evidence. That is your request?

WITNESS: Yes.

Mr. COWAN: I for one cannot agree that a public enquiry has any right to receive secret or private evidence. I would rather not have it at all.

By Mr. Ross:

Q. Do these statements show your cost of production per ton?—A. No, they do not go into that detail.

Q. And after all that is the only thing you really do not want known, is it not?—A. Well, I will not answer that in the affirmative. Mind you this: I have every desire to give this Committee all the assistance possible in our power, but I do not think it should be public property, either to our competitors at home or to competitors abroad, or to people who might, through lack of full knowledge which the Committee would have, garble the report of evidence, or take one part of it and leave out other parts, and it is easily done in an industry of this kind.

By Mr. Douglas:

Q. Would it not be fairer to have your statements public? There would be no garbling. Your annual statement is made a public document because you are publishing it?—A. You are dealing with an annual statement, and what it leads up to.

Q. We are dealing with what the Committee had before it, the annual statement?—A. Well, I still request that the question of profits and costs be kept within the Committee, and I think now is the proper time to do it. I do not think the costs and profits should go to our competitors at home or abroad, or to the undiscerning public who might be desirous of garbling partial evidence, and not knowing the whole evidence, as this Committee is competent of knowing, after they go into it from start to finish. That is my whole aim in asking you to put it in with that restriction. I think it would be a great pity for the industry of this country if evidence were afterwards garbled by people who have a special axe to grind, if they would grab hold of something and spread that throughout the country as has been done before, not by this Committee, but in other investigations, and give the press of this country and the public of this country generally a wrong impression of the true facts of the case, and I say no one reading casually in the press a few figures relative to an industry is competent to judge whether the industry is profiteering or not.

Mr. COWAN: Precisely, and if we do not get the full facts how can we inform the people? We are stalled just at that point, and unless we are compelled to insist on compliance with our order in the full, I say this evidence should not be insisted upon at all.

Mr. ROSS: I cannot agree with regard to this matter. Committees have sat in executive session, and every person excluded except our reporter, and matters were transacted of a more or less private nature. I do not see why this Committee cannot sit in executive session and get the evidence, and exclude what we want from the

[Mr. J. Mackie.]

report, and come to a conclusion on the evidence given en camera. If our report is going to be any good I think we should find out these costs. No person wants to injure the company, or give their secrets to their competitors here or abroad, but I think they will agree that we should have the information if it is going to be of any use. I do not see why we cannot sit in executive session.

The CHAIRMAN: Before we present the report to the House it will be necessary to have one or two executive sessions.

Mr. ROSS: Why could not that evidence be given in executive session?

The CHAIRMAN: There is another point to my mind. The witness has told us that these annual reports do not give the cost per ton of producing coal. Why should the company endeavour to load us down with a lot of information which will be of no value to us and especially why should we think of publishing in our evidence ten annual reports which can be of no value in my estimation to either the Committee or the public.

Mr. COWAN: The next company that comes along would want the same thing, and we would have a report forty feet thick before we got through with it.

Mr. DOUGLAS: It might be desirable, on account of the large number of reports, if we are going to take them from other companies, not to publish them all at any rate. Perhaps two or three years might be sufficient.

Mr. COWAN: The original motion was that these cost sheets be called for. I do not think this statement meets our requirements at all.

Mr. DOUGLAS: These are the annual statements.

The CHAIRMAN: Is it the desire of the Committee that these annual statements should be received and put on the record?

Mr. McKENZIE: That statement is not what we called for, as Dr. Cowan has stated. We asked for original cost sheets. These are not original cost sheets.

Mr. COWAN: Not at all. I take the ground that we cannot receive evidence unless it is to be published. He has given us evidence which he asks to be withheld. Practically it is not evidence at all.

The CHAIRMAN: If you make a motion that this evidence be not received as evidence—

Mr. COWAN: I move that it be not received as evidence, if it is necessary to make that motion, but I do not think it is.

Mr. McKENZIE: It is not necessary to make a motion to that effect. We are here sitting as a court, and if you decide it is not evidence, and nobody finds fault, there is no motion necessary.

The CHAIRMAN: Except this, that the witness laid these documents on the table before the Committee. I think the Committee could dispose of them. If you leave it to me I will certainly decide that they should not go in the evidence.

Mr. McKENZIE: The fact that the witness has put a document on the table does not invest this Committee with any control of it. It is not impounded because he has put it on the table.

The CHAIRMAN: The witness has made a request that it should be received by the Committee but not published. If the Committee does not desire to handle it in any way we will just hand it back to the witness.

Mr. McKENZIE: As far as this body is concerned you, Mr. Chairman, are the judge and whatever you rule as a matter of procedure must stand until somebody makes exception to it, and then there will be a motion appealing from your ruling.

The CHAIRMAN: Except in this way that there is no doubt this can be received as evidence if the Committee so decide.

Mr. McKENZIE: What I say is this (and Dr. Cowan agrees with me) that we asked for certain documents, and the gentleman comes here with another different document, and we say that is not what we are looking for, and we cannot take cognizance of that at all.

The CHAIRMAN: That does not prevent us from receiving this document.

Mr. McKENZIE: No, but I think we should have the real thing if we are going to receive the matter at all.

The CHAIRMAN: The matter is in the Committee's hands.

Mr. COWAN: I move that it be not received as evidence, as it may not be made public.

Mr. McKENZIE: Perhaps I am too much of a stickler on procedure, but that is a motion that could be made when you have decided to receive it. Dr. Cowan's motion would then be in order, if you, as the Chairman, decided you were going to receive that as evidence. The motion would then come that you are wrong, and that it should not be received.

Mr. COWAN: I think Mr. McKenzie is right there, that is the reason I asked for it before.

Mr. McKENZIE: You have not received it, and therefore there is no motion necessary.

Mr. DOUGLAS: As to the publication of these statements in the record, I think it would be necessary, but there are naturally some questions arising out of the statement that I think should be made a matter of record, such as, for example, the Capital Stock, and the Dividends that have been paid, how the company was getting along, the quantity of coal they are mining, and all that kind of thing; but as to cumbering the minutes with financial statements of all the companies, I do not think that is necessary. The crucial points in the annual statements, and the relative comparison over seven years, would be of some value.

The CHAIRMAN: That information could be got from the witness.

Mr. DOUGLAS: Yes, by asking him questions.

The WITNESS: We are desirous to assist the Committee, but after all it is the industry as a whole you are investigating, and unless you have the statements of the less successful companies as well as the more successful companies, you will give to the public a wrong idea of the industry as a whole, and I think your conclusions can only be reached when you have before you an amalgamated statement of the whole industry in any part of the country.

By Mr. Douglas:

Q. How can we get that unless we go into the individual statements? We have to start somewhere.—A. If you go into the individual statements I think you would find a request which the Government granted in their earlier investigations, that all those figures be kept within the Committee. They did that there. Now, notwithstanding this investigation, we did not know what our neighbours were doing, and this Committee would not be able to put before the public the real statement of affairs in Alberta, unless they get the statements of every company in the province, and if they got those for the past nine years they would know in a very few minutes whether the industry was profiteering or not, and I am satisfied that they would find the industry was not profiteering, and that a great many companies have gone to the wall.

By Mr. Cowan:

Q. That is the thing, I think, you are called upon to prove first, because that is the vital point at the present time. The people believe you are profiteering, regardless of what you may think. There is no question about that.—A. Is it your wish that I recite what has happened in our immediate district in the last ten years?

[Mr. J. Mackle.]

The CHAIRMAN: I think the Committee would make better progress if they would decide now whether they wish to receive these documents as evidence or not. I think a simple motion along the line of Dr. Cowan's—

Mr. COWAN: I still maintain that you have no right, as Chairman, to allow them to go in unless they are going to be made public. If they are going to be made public I do not care.

The CHAIRMAN: Leaving aside that argument, the Committee has power to decide the matter, and I am leaving it to the Committee to decide whether they wish to receive it as evidence or not. Then we will have to decide whether they should be published in the records or not.

Mr. MCKENZIE: To begin with this gentleman on the stand objects, as I understand it, to publishing these statements. He thinks it would be putting his company in an unfair light as compared with other companies. We should have some record, I think, of the position taken by the witness, and I think if we receive these documents at all as evidence, they have to be published. I think one follows the other.

The WITNESS: May I say this in regard to your remarks: It is not a question of unfairness, but a question of what this Committee is trying to accomplish, and that is to get into their own minds first, and then to give to the public of Canada, the true situation as to the general coal industry in Canada. Now, as far as our section goes, I submit to the Committee that the calling of Hillcrest, Rosedale and Brazeau, will not give a fair view to the Committee or to the public generally of the coal industry in Alberta, and I request that any data we give now be used in reserve, and be kept in reserve until the Committee gets a statement from all the companies and are able to amalgamate the condition of the whole trade.

By the Chairman:

Q. To put it in another way, you request that it be not made public?—A. Yes, and I am beginning with the annual statement, so that the thing will not begin to go in until the conclusion of the Committee on the whole thing is put to the public.

Mr. COWAN: If that is going to be persisted in and agreed to, we might as well close up our Committee work at once.

The CHAIRMAN: The only thing before the Committee is the disposition of these annual reports.

Mr. CHISHOLM: There is a motion before you, Mr. Chairman, which has been moved by Mr. Cowan.

Mr. COWAN: I move that nothing be received as evidence except what is to be made public.

The CHAIRMAN: That does not quite meet the case, because we may immediately decide that this be put in the records; we are not sure.

Mr. COWAN: That is all right; that is my position; the rest can do as they please.

The CHAIRMAN: Mr. Cowan has made a motion. Does any one second it.

Mr. MCKENZIE: What is the motion?

Mr. COWAN: That we do not receive any document as evidence unless it can be made public, or that all evidence received here be made public.

Mr. DOUGLAS: I will second that motion.

Mr. COWAN: It is the same thing in the reversed form.

The CHAIRMAN: Of course, that is not dealing with the question as to whether we shall receive these annual reports.

[Mr. J. Mackie.]

Mr. Ross: You are not getting at it by that motion. I think it would be most unfair to spread the information broadcast. We could deal with it in executive session, and if we do that we are fulfilling the purpose for which we were constituted.

The CHAIRMAN: There is a motion before the Committee which has been moved by Mr. Cowan and seconded by Mr. Douglas that all evidence received be inserted in the records.

Mr. Cowan: Not necessarily, because we might get some evidence that might be voluminous that we could not possibly insert in the records, but if we wish to make it public, it should be within our discretion to do so. I do not think we have any right to conceal it.

The CHAIRMAN: Of course, the only publication of any evidence that we have control over is the record. I do not think we should undertake to make the evidence public in any other way.

Mr. Douglas: I do not see what advantage would be gained one way or the other in the publication of these annual statements.

The CHAIRMAN: Can the Committee not decide that we shall not receive the documents as evidence, and then we are done with the matter? It seems to me to be a very simple question to decide.

Mr. Cowan: The position I take is that we ordered certain evidence and other documents are presented to us in substitution therefor, which other documents are not what we ordered.

The CHAIRMAN: We are endeavouring to discuss three or four or five subjects at one time. Let us deal with one thing at a time. The witness has stated his willingness to lay these documents before the Committee with the request that they be not published. What does the Committee desire to do with these documents? Mr. Cowan's motion stands and is now put to the Committee.

Mr. McKenzie: I still say it is a question for you to rule upon, Mr. Chairman.

Mr. Cowan: That is my own view, but he will not rule.

Mr. Chisholm: The Chairman did not say he would not rule.

Mr. Cowan: He has not ruled, which is the same thing.

Mr. McKenzie: Practically, the Chairman must decide what is and what is not evidence.

The CHAIRMAN: Is it the desire of the Committee that I rule on the matter?

Mr. Cowan: It has been my desire for some time. That is the reason I made the motion I made, because I thought you were not going to rule.

The CHAIRMAN: Then my ruling is that these documents be not received as evidence.

Mr. Ross: We got certain evidence as to the cost of production from a colliery in the East. I would like some evidence from Mr. Mackie as to the cost of production in the West, as closely as he can give it.

By Mr. Ross:

Q. How many tons of coal did you produce last year, approximately?—A. Roughly 300,000 tons; it was our best year.

Q. And what was the cost of production, taking material and depreciation, and all the various items that all coal companies add together to make up the total cost of production, into consideration? I do not mean what you sold it at, but what it cost you.—A. I will do the best I can for you. I am speaking from memory now, because I have not the data—

[Mr. J. Mackie.]

The CHAIRMAN: May I raise this point. Is it fair to the witness to ask him to give a statement of that kind?

Mr. Ross: He is not objecting.

The CHAIRMAN: But the Committee may object. The Committee desire only accurate information. The witness says, in effect, that he is not prepared to give accurate information. I just raise the point for the Committee to consider.

Mr. DOUGLAS: If he states that the information he now gives is not absolutely accurate, we will understand that.

Mr. Ross: He has stated that.

By Mr. Ross:

Q. Give us an approximate idea as accurately as you can?—A. I have no figures here, and it is impossible to get them here.

By Mr. Douglas:

Q. You did some figuring in connection with that annual statement. What did you do? Tell us that?—A. I am going to do so.

Q. What were you doing?—A. According to my memory it was 314,000 tons last year. The profit on that was \$106,704, which is about 53 cents a ton profit. Now it may be 320,000 tons; I am not sure.

Q. Never mind that. What did it cost?—A. Of course, I can only—(Witness did some figuring).

Q. You were not figuring out costs at all then. You must have been figuring out profits.—A. I can only make a good guess again, because you asked the cost.

The CHAIRMAN: I do not think we should receive guesses.

Mr. DOUGLAS: Please permit the witness to answer the question.

WITNESS: What is the question?

By Mr. Douglas:

Q. Approximately what was your cost of production last year? You were giving the figures for 1920. You gave the output and the profits?—A. I only gave you the output from memory.

Q. We have your statement as to that. There is no need to repeat it. What was the cost?—A. I think I would be very foolish to trust to my memory on these figures when they may be misleading to the Committee.

By Mr. Cowan:

Q. Precisely. That is why we want the costs sheets to find out?—A. (No answer).

By Mr. Douglas:

Q. If you say the approximate cost was so and so, it will not be misleading to the Committee. We are not asking for the exact figures?—A. I want you to appreciate how difficult your question is, and in order that you may do so let me tell you we had, I think, three increases in wages during that year, and our cost in the first period would be so much—that figure has gone from me and I cannot remember it. The cost during the next period would be so much, and the cost during the final period would be so much. I cannot remember the first two but the last period was about \$5.00 a ton.

Q. \$5.00 a ton was your last cost?—A. Yes.

Q. And there were two increases earlier in the year?—A. Yes.

[Mr. J. Muckel]

Q. What were those increases?—A. That is a very complicated thing. That was increased on a day-rate basis, a percentage basis, a cost per ton basis to the miners, and then a plus cost of living on top of that. It would take a Philadelphia lawyer to answer some of these questions.

Q. Do you know what it worked out at per ton?—A. No, I do not.

Q. You do not know whether it worked out, at say \$1.00 a ton?—A. \$1.00 a ton increase in cost?

Q. Yes?—A. From the beginning to the end of the year, speaking from memory again, I think it did.

Q. So that the cost from the first of the year?—A. You ask if it cost \$1.00 a ton and I said yes, but I think it was more.

Q. And if the cost at the end of the year was \$5.00, the cost at the first of the year was under \$4.00?

The CHAIRMAN: You are speaking of wages when you speak of \$1.00 a ton?

Mr. DOUGLAS: Yes.

A. The last increase did not occur until towards the end of the year, I would say in October, and it was around \$1.50 a day to every man around our mines. I think the increase at that time was unwise and unnecessary, but we had to put the increase on because the Controller of coal operations decided we should do so.

By Mr. Douglas:

Q. Do you keep your costs on a long or short ton?—A. It is all figured out on a short ton out West; that is, our final costs. We figure both ways. Some of the work is figured on the gross ton but we sell to the railways on the net ton.

Q. Generally speaking then, when you make a statement about costs you refer to the net ton or short ton?—A. Yes.

By Mr. Ross:

Q. All your sales are made to the railways?—A. Oh, no.

Q. Pretty much?—A. 70 per cent.

Q. What are you getting a ton for most of it?—A. It varied three times last year.

Q. Yes?—A. \$5.25 was the rate.

Q. Was that your average rate?—A. No, I do not know whether it was \$5.25 or \$5.22; I think it was \$5.25.

By Mr. Douglas:

Q. That item of \$5.00 you gave us of cost contains what proportion of labour?—A. I could not say.

Q. Could you give a rough estimate?—A. No, because our cost sheets of labour are divided up into half-a-dozen different items.

Q. That is dividing up labour now?—A. Yes.

Q. What proportion of that \$5.00 would be the total for labour?—A. I do not presume to remember those figures.

Q. And you do not know what it cost for material per ton?—A. No.

Q. I suppose you know what it costs per ton to pay interest on your capital?—A. No; it varies according to the tonnage we get out.

Q. Have you been paying dividends?—A. Yes.

Q. For several years?—A. We paid 2 per cent in 1918, and 4½ per cent in 1919, and 7 per cent in 1920. From 1910 to 1918 we did not pay any dividends on the common stock.

Q. What is your capital?—A. \$325,000 bonds and \$705,000 preferred stock, and \$1,000,000 common stock. That is our outstanding capital.

(Mr. J. Mackie.)

Q. Have you paid off some capital?—A. No, I say that is our outstanding capital, issued capital.

Q. Do you know anything about the rate of wages in the mines of Nova Scotia in comparison with your mines?—A. No, I do not. All I know is mere hear say in regard to that; I have no knowledge of it.

Q. You gave one rate there that you were paying common service labour,—82½ cents an hour.—A. Yes.

Q. Can you give the Committee any other outstanding rates?—A. No, for the reason that it is largely contract; it varies, it is largely piece-work. That is the one big item, that is a fixed rate, so much per hour. The great bulk of our other items is made up according to what a man does.

Q. I suppose the directors are paid salaries?—A. They are not paid salaries; they get directors' fees.

Q. Are those shown in your statement?—A. I think so. For a number of years they did not get anything. They had to do without, as the shareholders did, for seven or eight years. It does not show in detail there.

The CHAIRMAN: Are there any further questions you desire to ask this witness? (No response).

Witness retired.

The CHAIRMAN: Is it desired that Mr. Mackie be discharged as a witness?

Mr. COWAN: Oh, no; not yet.

Mr. MACKIE: I should like to get back to Montreal to attend to some business there.

Mr. COWAN: The position is that he has not submitted the documents we called for. How are you going to discharge him? We may extend the time in which he may furnish the proper information.

By Mr. Douglas:

Q. Mr. Mackie, when do you expect the original cost sheets to be here?—A. It will take some time to prepare them.

The CHAIRMAN: If the Committee desire to ask Mr. Mackie any further questions I think he had better return to the witness stand.

Mr. ROSS: Mr. Chairman, I move that this Committee now adjourn to discuss our report, and that the witness be not discharged in the meantime. I move that we adjourn to meet in executive session to discuss the draft report and such other matters as may be deemed wise.

The CHAIRMAN: Is it understood that you are through with Mr. Mackie for the present?

Mr. ROSS: Yes, for the present, but not discharged.

Mr. MACKENZIE: I second the motion made by Mr. Ross.

The CHAIRMAN: It has been moved by Mr. Ross and seconded by Mr. Mackenzie, that the Committee now adjourn and immediately go into executive session.

Motion agreed to.

Committee adjourned.

The Committee resolved itself into executive session.

The Committee resumed at seven o'clock.

[Mr. J. Mackie.]

The CHAIRMAN: Will the Committee please come to order. I think I understand it is the desire of the Committee now to hear Mr. McDougall; is that correct?

Several MEMBERS: Carried.

W. H. McDUGALL recalled.

By the Chairman:

Q. I may state in accordance with your suggestion, Mr. McDougall, the Committee postponed the necessity of your attendance from last Saturday until to-day, and you will remember that the request of the Committee—or rather the desire of the Committee was—and a message was sent you in accordance with their desire as follows:—

“May 19, 1921.,

“You are hereby summoned and required to appear before the Fuel Committee of the House of Commons, at 10.30 a.m. at room 425, on Wednesday, May 25, 1921.”

A former message requested you to attend with the original costs sheets of your company from 1912 and 1918. Now, I have no doubt the Committee will be anxious to know how you have responded to their second request; we know you are here in person, but what about the request to produce these documents?—A. Mr. Chairman, and Gentlemen: I found this request of yours to be a very formidable undertaking indeed, and a very difficult one to carry out. The data that you have asked for would require the preparation of a great many documents and we have not been able to prepare these documents in the time that you have given us.

I might say that the request for the production of costs struck us as being an unusual one, and one that would work a great hardship on our company. We have always regarded our costs as sacred, and many of the officers of the company, holding very responsible positions indeed, did not have access to the costs; in fact, while serving in the capacity of general superintendent and assistant general manager of the Dominion Coal Company for quite a number of years, I did not have access to the costs, although, I had authority to sign cheques covering the expenditures of large sums of money. I mention this, Mr. Chairman, in order to give you an idea of how carefully our costs have been guarded, that is, the final costs sheets; and it has been done particularly because of the competition that we have been meeting in the Montreal and other markets. American coals, as you know, came into Canada and met our coals, and it was only after years of effort that we were able to build up a large business in the Montreal market. This business became lost to us during the war, and we are only now slowly working in there again. It is going to take us a long time to regain our position in that market, and in the meantime, any costs we might show would not be representative of what we hope to attain at a later date. We would not regard these costs as representative, neither would we regard the costs of 1912 as representative costs, because the conditions that obtained at that time do not exist any longer. We feel that the production of sheets showing the cost of coal at our collieries would be a great handicap indeed; that it might entail danger from many different directions, and may even involve the possibility of serious unemployment, and might perhaps result in taking food from the homes of our employees. This I hope, Mr. Chairman, will give you some idea of the seriousness with which we regard the making public of our costs statements. In addition, I understand that other coal operators in this country have been asked to produce costs sheets, and have not yet done so. I would submit, sir, that it would be very unfair to ask our company to present cost statements when

[Mr. W. H. McDougall.]

others have not done the same. I might say that so far as our costs are concerned, and so far as this Committee is personally concerned, we have nothing to conceal. It is not that feature of it that appeals to us; it is the fact that we believe that the publication of these costs would work a great injury to a deserving industry.

Q. I suppose from your statement, Mr. McDougall, we can assume that you are not prepared to present to the Committee these costs sheets now?—A. I am not prepared to present these costs sheets now. That is, I do not think, in all fairness, that we should be asked to present those costs sheets which would give information to our competitors in the United States at a time when other producers of coal in Canada are not doing the same. I will say that I would not hesitate, so far as this Committee is concerned, to go into our costs sheets with them in confidence, and to give them any information which they might desire, and of which I may be in possession.

Q. Have you the costs sheets with you?—A. I have not at the present time; I have some data with me.

Q. Of course, the Committee asked for the original cost sheets. You have not them with you?—A. I have not the original costs sheets. I might explain, Mr. Chairman, that there are a great many documents contained in original sheets. In fact, what are termed as the original costs sheets are really not costs sheets at all; they are records of certain expenditures.

Q. Mr. McDougall, we are not all familiar with coal mining. I mean, all the members of this Committee are not familiar with the coal mines. We have not that advantage which the Nova Scotia members have. For the benefit of those who are not familiar with this, will you explain what the costs sheets are, and what information is on them?—A. The sheets ordinarily spoken of as "costs sheets" at our coal mines, are simply records of expenditures against labour and material, and the power generated either at the colliery itself or some central power plant for the purpose of hoisting the coal. In some cases they include royalty, and in some cases they do not. They are not all formulated under the same policy. That is, some of the groups of collieries employ one policy and others another, but generally speaking, these sheets record expenditures against labour and material.

this case, Mr. Douglas, the costs sheet only carries a part of the cost. I believe

Q. There are a number of mines that are controlled by your company?—A. Yes. The Dominion Coal Company's collieries are in the Glace Bay district. There are seventeen of them.

Q. Do all those seventeen mines use the same system of keeping these sheets?—A. The seventeen mines use practically the same system. At Sydney Mines, there are five collieries; the Acadia Coal Company at Pictou, formerly had six in operation, but some of them are closed down now; at Springhill there are three collieries.

Q. Can you tell the Committee what the other operating companies throughout Nova Scotia—do they use the same system?—A. I doubt if any two of the companies use the same system.

Q. At any rate, on these costs sheets, there are not entered all the items that enter into real cost?—A. On these costs sheets, there are not entered all of the items that go to make up the costs.

By Mr. Douglas (Cape Breton):

Q. Would this be a fair and correct statement to make, Mr. McDougall, that the original sheets referred to are the actual cost of production—the cost to the Company—and the cost to the consumer would be the final cost to which you refer?—A. No. In the Dominion Coal Company's sheets make provision for royalties; I think they make provision for power. But the ordinary costs sheets make no provision, for instance, for the loss on 'employees' coal, which is substantial at these collieries to-day, and it makes no provision for the loss in maintaining the company's houses; there is no provision made for depreciation or depletion of areas, or for interest on bonds; none of these items are included and they all form, of course an

[Mr. W. H. McDougall.]

important part of the cost of coal. Then, again, these costs sheets do not include the cost of transportation of the coal from the mines to the shipping points. That is, the collieries in Cape Breton, doctor, are situated along a line of railway—that is, the Dominion Coal Company's collieries, are situated along a line of railway owned by the Company. The railway is approximately thirty-eight miles in length. The first of these collieries met in travelling toward the mines from Sydney is about ten miles distant from Sydney, and then for a distance of about twelve miles, branch lines go out to the various collieries. At the far end of the line is a shipping port, Louisburg. Coal shipments are made from there mostly in the winter. The bulk of the shipments are made from Sydney in the summer. The distance from the centre of the mining zone to the Sydney piers is about fourteen miles, and to Louisburg about twenty-four miles. There is no provision made in the costs sheets for the transportation of coal from these mines to the various shipping points.

By the Chairman:

Q. I suppose that would be scarcely included in the cost of coal as we usually speak of the cost of coal at the mine mouth—it would not be included?—A. Transportation charges must be taken care of somewhere in the costs.

Q. Yes, it would enter into the cost of coal when you come to sell it?—A. Yes.

Q. At Louisburg?—A. Yes.

By Mr. Douglas (Cape Breton):

Q. So the colliery cost sheets are the costs at the mine's mouth?—A. They represent expenditures, Mr. Douglas, against labour and material, and are kept in the same form largely for comparative purposes; that is, so that month after month, those in charge of operation of the collieries may lay down two or three or four sheets and compare the various detailed items. For instance there would be charges for coal cutting by hand, and a charge for machine work, and a charge for haulage from the rooms, and a charge for haulage on the levels, and a charge for the main haulage of coal. All those various items are compared from month to month by the officers in charge of the operations, and that is really the object in keeping these sheets in the form in which they are kept.

By the Chairman:

Q. They are included in what may be called your overhead expenses?—A. No.

By Mr. Cowan:

Q. Still by taking those sheets and adding the other things to it you could easily determine what it costs to produce coal?—A. You could take those sheets.

Q. To produce and sell coal?—A. Make certain additions to them.

Q. You are prepared and willing to give that information in regard to that cost of coal to this Committee?—A. Yes.

Q. You are therefore able to do it?—A. Yes, I can do it. I am not prepared to-night, but I would undertake to give it in confidence to the committee.

Q. The fact is you have not done it?—A. It has been found to be too big an undertaking in the time allowed.

By Mr. Douglas (Cape Breton):

Q. You expressed the fear that the publication of these costs sheets is going to lead to unemployment in the collieries of Nova Scotia. I suppose that is not an actual fear on your part, is it?—A. I would say so, for this reason, that we are in competition with the best equipped and most advantageously situated coal mining operations in the world. These operations are located in the richest country in the world. The transportation of that coal to our markets is favoured by reason of special conditions.

[Mr. W. H. McDougall.]

The Quebec market in a favourite outlet for American coal. Anything that would serve to give our American competitors full knowledge of our situation would serve to put them in a better position to undersell us, and possibly to attempt to drive us again out of the St. Lawrence and Quebec markets.

By Mr. Cowan:

Q. Do you think they don't know that?—A. I don't believe they do.

Q. Do you mean to tell me you don't know what it costs to mine coal in the States? Now, honestly, they know what it costs you to mine coal. The Americans are keeping pretty close tab on Canada. We can go down into Chicago and get more information about our cattle condition and hog condition, and everything else out in Western Canada, than we can get at home. They have everything right down, and they have you down just the same. There is no getting out of that and they know what it costs you to produce your coal, and I don't think you need be a bit afraid about them getting more knowledge than they now have. They are compelling their companies to show what it costs and you know all about what it costs them. They know all about that. Why should we exempt you, to make you a favourite child?—A. I do not believe they know our costs, and I would be very sorry to take any steps that would serve to give them any information along those lines, and so far as their publication of costs are concerned it is a very simple matter. The average coal mine in the United States is a very different proposition from a coal mine in Nova Scotia. The capital expenditure required is very small indeed; the cost of production is comparatively low.

Q. I cannot help but think that public opinion to-day is your biggest asset in Canada and you have not gained that public opinion by taking them more into your confidence. I don't want to injure your company. It is the last thing in God's green earth I would want to do. It looks to me as though you are being injured by the course that has been followed. That is my own view.—A. We are not of that opinion. We believe we cannot afford to have those figures known.

By Mr. Douglas (Cape Breton):

Q. The position Mr. Wolvin took when he gave the costs for the month of March is upwards of \$7—he seemed rather glorying in the fact that the cost was so high that month. Then there was a statement made, Mr. Elkin, on behalf of the company in which he said the reason they did not want to give the costs was because it was going to show they were too high, that it was so high it would be difficult for the company to carry on the business and to raise money. Now the position taken by Mr. Wolvin and the position taken by Mr. Elkin were to my mind two diametrically opposed positions; one rejoiced in the high costs. Undoubtedly that was the way his evidence should be interpreted, and the other was afraid to have them published on account of them being so high.—A. Surely Mr. Wolvin must have been misunderstood. I would be inclined to the belief that he felt very badly over the cost being high.

Q. Can you tell us if that cost given by Mr. Wolvin—have you personal knowledge as to whether that cost given by Mr. Wolvin of seven dollars and something is correct or not?—A. I believe for that month, Mr. Douglas, that it is not far off.

Q. \$7.33?—A. I would not take the responsibility of absolutely confirming it to the cent, but I believe it is not very far off.

Q. Of course, you would admit that that was not a fair month to give the cost?—A. March was a broken month, Mr. Douglas.

Q. And bad weather?—A. Yes.

Q. As a rule bad weather to do any line of business in, transportation particularly, expensive?—A. Yes.

Q. In the month of March?—A. Yes.

[Mr. W. H. McDougall.]

By the Chairman:

Q. Tell us, Mr. McDougall, just briefly reviewing last year, how much time some of your mines or all of your mines were not operating. Just give us an idea of how much of the time was broken into by not operating.—A. The mines worked very steadily during the whole of the last year. Practically from January until December they were engaged in steady production of coal. There was very little broken time until after the first of this year. It was in sight in the fall and came on after the first of the year; really well into February about. January was fairly good.

Q. That condition prevails largely in the United States mines at the present time?—A. Yes, except that it began earlier in the American mines.

Q. I understand their's began in October, and it was quite bad in November and December?—A. Well, during the early month of this year; in fact right up to date.

Q. How would it be in your mine, supposing you worked only half time in the month, how would it increase the cost in that time as compared with the average American mine that worked only half time?—A. Very much higher, because our pumping and ventilating and general maintenance conditions are greater than in the American mines. We have deeper mines and more water.

Q. It costs a great deal more to carry your mines when they are not operating than it does to carry American mines when they are not operating?—A. As a matter of fact American shallower mines can be closed entirely during the dull period. That does not apply to the average mine in Nova Scotia. It must be kept going.

By Mr. Douglas (Cape Breton):

Q. On the question of costs Mr. Wolvin gave the cost of rolling rails at Sydney at about \$62.50, and he was asked this question, "That would figure coal at what price?" And he gave this answer, "Around \$3.40 we will have to get \$62.50." Now, I view that statement of Mr. Wolvin's as fixing the price of coal, the cost of production. What would you say in regard to that, as to whether that is approximately the cost of production of coal of the Dominion Coal Company?—A. I believe that figure to be substantially below the cost of production.

By Mr. Cowan:

Q. To repeat the question formerly put, you are bonusing the steel branch of that industry to that extent?—A. There are many points that enter into that situation, Doctor. For instance, it is not a disadvantage to the coal company to have the steel company as a customer for coal, even at a low price, for the reason that ordinarily steady employment is provided in the winter for the employees of the coal company, because of the necessities of the steel company. The organization is thus held together and banking large quantities of coal is made possible because of the coal taken by the steel works. Generally the steel works uses slack coal. It is the fine material that is screened from the coal as it comes from the mines, and the steel works uses this quality of coal almost entirely. Slack coal does not bring the same price on the market as the ordinary run of mine coal. In fact, it is very difficult to dispose of in quantities.

By the Chairman:

Q. What do you get for it?—A. The price for years to the steel company was the price mentioned by Mr. Wolvin.

Q. If you sell to other companies what price do you get for it?—A. Sometimes we get—it depends entirely on conditions—\$2.50, \$3; sometimes \$3.50 for it. Sometimes we get more and sometimes less, but the demand for slack coal is very limited.

[Mr. W. H. McDougall.]

Q. The demand is varied?—A. Yes.

Q. I think we had a statement, if I remember rightly, made to the Committee that some one representing your mines, Dr. Chisholm, said the slack was sold at \$1.25.

Mr. CHISHOLM: \$1.50, my impression is now.

By the Chairman:

Q. You don't mean to tell me there is less slack in the coal there as used by the steel company? I understood they used enormous quantities of it?—A. Yes, there are enormous quantities of slack produced, Doctor.

By Mr. Douglas (Cape Breton):

Q. I think the evidence went to show that Inverness made about 30 per cent of slack. That would be a larger proportion than the Dominion Coal Company?—A. Unfortunately that is a smaller proportion than the Dominion Coal Company.

Q. The Dominion Coal Company have more slack?—A. More slack.

By the Chairman:

Q. You say this slack has been sold to the steel company around \$3.40 a ton?—A. Not to the steel company. The slack has been sold in the market at various prices. I am not clear about the \$3.40 figure mentioned by Mr. Wolvin. I am of opinion that at some time during the war period there was reference to the \$3.40 charge as between the companies, but I have not been long enough with the Dominion Company this time to have found out about it. I believe it is not the cost of the coal, but it may have been at some period, but in any case it is the price of a by-product rather than coal as ordinarily spoken of.

Q. Is it all slack coal?—A. The great bulk of it is slack coal, but slack is a by-product—

Q. I would think you were charging the steel company pretty well at \$3.40 a ton?—A. If that is the price. I have only been one day in Sydney since becoming connected with the Dominion Company, but if that is the price I would regard it as a high one.

Mr. DOUGLAS: I thought it was given as \$1.55.

The CHAIRMAN: You mean the coal sold to the Steel Company.

Mr. DOUGLAS: Yes, the original contract. The contract as I understood it was \$1.55, but the actual cost of the coal going into the making of the rails was \$3.40. That was the statement, I understand, from Mr. Wolvin. He really mentioned four prices, \$1.55 contract price, and the price of \$3.40, and at one part of his evidence he gave \$6.25, and then he gave the market price of \$7 odd as the cost of production for that month, but the clearest piece of evidence he gave was around \$3.40 and that was the cost of coal entering into the making of the rails.

The CHAIRMAN: Supplied by the Dominion Coal Company?

Mr. DOUGLAS: Yes, to the Dominion Iron and Steel Company.

The CHAIRMAN: And a large percentage of that coal is slack coal.

Mr. DOUGLAS: Yes, but some of it may have to be made into slack, I do not know that.

WITNESS: I think that in the ordinary operation the proportion would be small, but it is true at times some of it has to be made into slack, but the quantity is small.

By Mr. Chisholm:

Q. If the Steel Company were not there at all, would you have any difficulty in selling the slack?—A. We would have very great difficulty indeed in selling the slack.

[Mr. W. H. McDougall.]

By Mr. Douglas:

Q. I do not think there would be any fear of serious competition from the Americans on that piece of evidence, that the coal cost \$3.40. That would not make for much employment, would it?—A. If that were the cost the company would be in a strong position, but I cannot think that it is the cost.

Q. That is the final cost you mean?—A. Or even the production cost. It is greatly in excess of that amount I believe.

Q. Can you give us the increased cost of labour during the past twelve months?—A. I don't know that I have it for the past twelve months.

Q. Perhaps it would be easier to take from the first of the year 1920?—A. I can give you the summation as reported to me of the increases granted since the beginning of 1916.

Q. If you can remember it all right?—A. It was reported as being between 130 and 140 per cent, according to the computations made by the officers of the Nova Scotia Steel Company with the Dominion Coal Company, the amount was slightly less, between 120 and 130 per cent there.

Q. And I suppose you notice the difference in the contract between the C.P.R. in 1912 and 1913 and the price that coal was offered to the railways in Montreal this year. It would be several hundred per cent, would it not?—A. I omitted to say that in that computation of the Dominion Coal Company's there was no provision made for the change to the eight-hour system. It was made in February, 1918. In effect it amounted to a substantial increase, but in the computation of increases granted no allowance was made for it. In the Nova Scotia Coal Company's computation there was some allowance.

Q. Would you allow 10 per cent for that?—A. Below 10 per cent, but approaching it.

By the Chairman:

Q. What do you mean by that change?—A. Previous to that time certain of the men employed in the mine where the operation was continuous worked for twelve-hour shifts. The change was made, and these men were employed for eight hours only, but were given the same wages they formerly got for twelve-hour services. There were other adjustments made at that time as well.

By Mr. Douglas:

Q. Can you give us any idea of the increased cost of material since 1912 or 1913?—A. The computation made at the Nova Scotia Steel and Coal Company's mines showed the increase in cost of materials to be 250 per cent.

Q. And material is decreasing now, is it not?—A. Materials are beginning to decrease.

Q. Can you give us any idea of the percentage of increase for overhead expenses between 1919 and the present time? Has that ever been worked out?—A. Not to my knowledge.

Q. For depletion of areas do you allow the same now as you did in 1914, so much per ton?—A. Yes, I think so.

Q. The same thing?—A. Yes.

Q. Apart from the new company, the British Empire Steel Company, the stock and bonds remain the same as they were in 1914, and there was no other increase in capital in any of the companies?—A. Not that I can recollect.

Q. Now I understand some of these minor companies down there are at present selling their coal to the Canadian National Road at a much lower price than you are getting. How is it they are able to do that? Can the smaller mines sell it cheaper than you can?—A. Some of them are very small and require practically no capital expenditure. They mine the coal from the crop where the outcropping intercepts the surface, and these in all cases are shallow mines. The cost of opening and equipping is very low, and they have not followed the coal for any depth from the surface, all of

[Mr. W. H. McDougall.]

which makes for a cheap operation, whereas the larger companies' operations are carried on on a much more extensive scale. The mines cost a great deal more money to equip, and the mining is carried on at a greater depth. Originally the larger companies began in the same way; they mined coal from the crop, but as they followed the coal further they were obliged to spend large sums of money for new equipment, and to face very much heavier mining work.

By Mr. Cowan:

Q. The proper thing for the Canadian National and other railways would be to buy all their coal from the other companies and let you go. That is what I would do if I were running the railway?—A. Some of these companies that are tendering for coal will not be able to do so for very long.

Q. It is good policy to get it as long as they can. By that time you will probably have your cost down?—A. To begin with—

Q. Business is business, you know?—A. Quite so. They could not produce the required quantity to begin with, and it will only be a matter of a short time when most of them will be worked out. In the meantime if the larger companies were compelled to find other markets they might not be so willing to supply the Canadian National Railway.

MR. COWAN: Your whole situation is an enigma to me, and I am not capable of grasping it.

By the Chairman:

Q. As a matter of fact the product of a smaller company is not sold to the consumer any cheaper than the product of your company?—A. It is not, except to the railways.

Q. Why does the domestic consumer in Halifax not get coal cheaper if these small companies can and do produce it cheaper for the railways?—A. I do not know.

Q. It seems to me the consumer in Halifax, from the prices we have heard, is paying very high for his coal?—A. I think, in fairness to the coal industry, I should say that a very substantial portion of the sale price of coal in Halifax is added after the coal reaches Halifax.

MR. COWAN: That is the first time we have had evidence here that the retailer was responsible for the high price.

MR. DOUGLAS: Mr. Dick said that.

MR. COWAN: Yes, and that is the only place I have heard where the retailer was held responsible for the high price of coal. All the evidence up to the present has shown that the retailer has been very modest. It may be so down there, but it is the only place we have found it.

By Mr. Douglas:

Q. The small mines are able to produce coal, on account of not having such long hauls, cheaper than the Dominion Coal Company, as I understand it; that the great cost to the Dominion Coal Company is largely on account of—that is from statement made by yourself on a former examination—on account of the submarine workings and the hauls being so long underground. You would then be able to hold out no hope, as these workings are increased in length, that in the future you could get any cheaper coal from Nova Scotia?—A. I would not say that, Mr. Douglas; I feel that we have got to produce cheaper coal in Nova Scotia, and we must find a way of doing it. One point that perhaps has been explained before, but is not, perhaps, clear to everybody, is the fact that the Dominion Coal Company's development of 1913 and 1914 had in mind a production of 5,000,000 tons of coal per year, and produced almost that quantity, and for days at a time produced in excess of that rate. During the war they lost a great many of their best men, and these losses have not been made up. The result is that to-day they have the development for that output, but are only producing approximately 3,250,000 to 3,500,000 tons.

Q. I thought development work went behind on account of the war?—A. There are developments and developments, but what I had in mind was the number of openings. When I spoke of the property being developed for a certain output, I meant particularly the number of shafts and slopes. In addition to that there is inside development, some of which did go behind, but the result of it all is that to-day the property is producing less than two-thirds of what we prepared it to produce a few years ago, and under these conditions, naturally, the cost would be higher than a cost that can be obtained later on, if a large increase in production is effected.

Q. Would the Dominion production per day now be about 14,000 tons?—A. I would say nearer 13,000, 13,500.

Q. And ten years ago they produced as high as 20,000 tons?—A. We have produced as high as 20,400 tons in a day.

Q. Mr. Wolvin gave a statement to the effect that in the course of half an hour they had voted \$5,500,000 in order to get these properties in first-class shape. What has been done about that with a view to increasing production and the lowering of costs?—A. The sinking of a shaft near Dominion No. 1 was started last summer, and although I have not been on the ground, I understand the work is still going ahead. Such a shaft would cut the haul for No. 1 mine coal very substantially. It was intended to extend other workings at some of the other mines, and possibly to put down a shaft in Caledonia, a hoisting shaft. It was intended to make one or two additional openings.

Q. Is this money still available for that purpose?—A. I am afraid we have not got the money now.

Mr. COWAN: Well, Mr. Chairman, we have one minute in which to get those cost sheets. Are we going to report to the House that we cannot get them?

The CHAIRMAN: We will have to adjourn in a minute or so. Is there anything you desire to ask Mr. McDougall?

Mr. McKENZIE: How much time have we left?

The CHAIRMAN: About a minute and a half.

By Mr. Douglas:

Q. Can you give off-hand the proportion of the cost of haulage to the production cost?—A. I am afraid I cannot give you that; I have not got it here.

Q. Or the proportion of labour in comparison with material in the matter of cost? I may say that in the case of the West they said 75 per cent of their cost was made up of labour, and 25 per cent of material. How would that compare with the Nova Scotia mines?—A. I think the proportion of labour in the Nova Scotia mines would be greater.

The CHAIRMAN: Gentlemen, we had better bring our examination to a close.

Mr. DOUGLAS: Unless the House would give consent for us to sit?

Mr. COWAN: What object is there in our sitting when they have not got here what we want? We might as well quit.

The CHAIRMAN: Is there anything else you wish to ask Mr. McDougall? If so, let it be asked before the bell stops ringing.

Mr. DOUGLAS: As far as I am concerned, nothing will suit me but the original cost sheets, and not confidentially, either.

Mr. COWAN: We might get such power from the House, but I take it we have no such power at the present time.

The CHAIRMAN: Are you through with Mr. McDougall?

Mr. COWAN: Yes, he may be allowed to go, but he is not to be discharged, because to discharge him would free him from the obligation we have placed upon him.

The Committee adjourned at 8 p.m. to meet at the call of the Chair.

HOUSE OF COMMONS,

COMMITTEE ROOM 425,

SATURDAY, May 28th, 1921.

The Special Committee appointed to inquire into all matters pertaining to the future fuel supply of Canada met at 10.30 a.m., the Chairman, Mr. Steele, presiding.

Mr. NORMAN GUTHRIE, K.C.: I heard yesterday that some question had been raised in committee in the executive session as to the non-appearance, I think, of four witnesses summoned from the Nova Scotia Steel Company and the Dominion Coal Company. I wish to say to the committee that their non-appearance is entirely due to my fault. At the time the summons was issued I understood from the discussion in the committee—and I think I am correct in that—that if Mr. D. H. McDougall, the chief executive officer, would appear that that would satisfy the requirements of the committee and I so advised my clients. Now, the blame for the non-appearance of these other witnesses, the auditors, etc., is entirely due to that. I informed Mr. McDougall that if he appeared and made an explanation, or produced the cost sheets to the Committee, that would be entirely satisfactory to the committee. I have made a mistake, and I am very sorry, but I do not wish these gentlemen to be blamed, or to be charged with treating the committee with any discourtesy or contempt. When Mr. McDougall appeared on Wednesday, I think it was, you all recollect he went on the stand and gave his reasons for not producing the cost sheets at that time. The chief reason was, of course, that the western operators had informed the committee that they were unable to get their cost sheets and produce them. Now, I must say I had the impression at the close of that meeting that Mr. McDougall's explanation was satisfactory to the committee. If that is not so, I can produce Mr. McDougall again and can produce all the other witnesses, if the committee thinks that that is necessary. I would submit with great respect that in view of the fact that the western operators cannot apparently bring their cost sheets here, or get them in time, that the committee should not press the Dominion Coal Company to do this. However, we are entirely in the hands of the committee, and will be governed by your decision, but I wish to exonerate the subordinate officers of the company from any charge of contempt or disobedience. I wish the committee to clearly understand that their non-appearance is entirely due to my own fault. I misunderstood the attitude of the committee. I am very sorry, but I think perhaps some members of the committee will agree with me that that was the attitude of the committee at that time, that if McDougall, the chief executive officer, appeared, the other witnesses would not require to appear. I acted on that, and if I have been incorrect, I am very sorry.

Mr. DOUGLAS: These witnesses are not sick?

Mr. GUTHRIE: I really do not know what the position is. You see I had no notice even of this morning's committee meeting, and I had no notice of yesterday's meeting, and I just heard, as a matter of gossip, that the matter was taken up by the committee. I can get in communication with the witnesses by telegraph. I do not know where they are at present, but it is quite possible for me to find out if the committee thinks it important for them to be here. I wish to explain this morning that you must not blame the witnesses; it is my fault. I understood the committee would be quite satisfied if Mr. McDougall appeared.

Mr. DOUGLAS: I do not think there is anything on the record to indicate that.

Mr. GUTHRIE: I think there is.

Mr. DOUGLAS: I would be very much surprised.

[Mr. Norman Guthrie, K.C.]

Mr. GUTHRIE: I have a fairly good memory, and I recollect that when the matter was discussed there was some doubt; Dr. Cowan did not know exactly whom to summon, and the remark was made "Well, if Mr. McDougall comes, that will be sufficient."

Mr. COWAN: I made the statement that if any one of them would come and bring the cost sheets I would be satisfied, but the unfortunate thing is that no one of them did so.

Mr. GUTHRIE: Mr. McDougall appeared.

Mr. COWAN: He did not bring the cost sheets.

Mr. GUTHRIE: But he did something which was equivalent. He offered the committee an explanation which we thought was accepted. That was the position, I understood, it was left in at 8 o'clock Wednesday night—that McDougall's explanation was accepted by the committee. I did not see anything to indicate otherwise. Mr. McDougall is at the disposal of the committee at any time, or the other witnesses but of course I am bound to say that we must—and Dr. Cowan will agree with this—we must take the position that we should not be required to produce the cost sheets unless the western operators produce theirs. I think that is a fair position.

Mr. DOUGLAS: But even apart from the production of the cost sheets, these witnesses can give material evidence, and they can give some evidence that would explain some of the statements made by Mr. McDougall himself.

Mr. GUTHRIE: That is, perhaps, my mistake. I understood they were summoned entirely on the question of the cost sheets. If you will carry your memory back to the original motion of Dr. Cowan, it was directed entirely to that point, and I had nothing else in my mind; I never anticipated that there would be any general examination of these witnesses. If the committee desires them, they are available. I thought it was entirely in reference to the cost sheets.

The CHAIRMAN: What is the desire of the committee in this matter?

Mr. DOUGLAS: When could they be here?

Mr. GUTHRIE: I think, as a matter of fact, they are in Sydney and New Glasgow. Mr. Douglas would know better than I would.

Mr. DOUGLAS: If they are in Sydney I would know.

Mr. GUTHRIE: Well, they are, as far as I know. There is Mr. McCann, Mr. Gordon, Mr. Merrill and Mr. McCall. My impression is they are in Sydney and New Glasgow. Leaving there to-morrow, I suppose they might be here Wednesday noon.

Mr. DOUGLAS: They could be here Tuesday afternoon.

Mr. GUTHRIE: That is, coming up on the I.C.R.

Mr. DOUGLAS: Yes, or the C.P.R. Mr. Elkin appeared before the committee, and he stated that he had been in touch with Mr. McDougall on the telephone and Mr. Gordon had brought the sheets to Montreal and that he was going over the sheets with Mr. Gordon in Montreal. So that Mr. Gordon was there anyway—

Mr. GUTHRIE: When was that?

Mr. DOUGLAS: It must be two weeks ago.

Mr. GUTHRIE: I had no instructions on that. I think, as a matter of fact, the sheets are probably in Montreal by now, but I do not think Mr. Gordon is in Montreal. My opinion is that he is down in Nova Scotia. If the committee desire them to appear and will give a reasonable time for them to get here for the purpose of examination, they are perfectly willing to be here and render any service they can. Of course we will have to raise that question as to the production of the cost sheets, and it will be in the hands of the committee to say what action will be taken.

[Mr. Norman Guthrie, K.C.]

Mr. DOUGLAS: Then, apart from the cost sheets, there is the question of the non-appearance of the witnesses.

Mr. GUTHRIE: It is entirely my fault.

Mr. DOUGLAS: We had Mr. McDougall and had his examination, and there was some very material evidence given by Mr. McDougall on the question of cost, apart from the production of the actual cost sheets. No doubt these men who are actually making up these cost sheets, whose business it is, could, without even being required to produce the sheets, give very material evidence—

Mr. GUTHRIE: I am quite sure you are right.

Mr. DOUGLAS: I know, for example, in regard to what these sheets contain, Mr. McDougall indicated that these sheets did not contain very much. They do contain a very complete record of all the expenditure entering into the production of coal.

Mr. GUTHRIE: I am not familiar with that.

The CHAIRMAN: I judge that all that Mr. Guthrie can say to the committee is to make a statement as counsel for these men. He is not here as a witness, and I do not think he should be questioned.

Mr. GUTHRIE: I take the blame for their non-appearance, owing to the remark of Dr. Cowan that if one appeared it would be sufficient.

Mr. COWAN: No, I will correct that statement; I said if one appeared with the necessary information that was required—and that has not been done.

Mr. DOUGLAS: I made a motion that was not acceptable to this committee, that the names of those parties be reported to the House for contempt of the committee, the House to take such action as they saw fit, but if these gentlemen are going to come to submit to examination, it might not be necessary to go as far as that. If they are in contempt, while Mr. Guthrie's explanation is a reasonable one—and certainly I think the committee should be inclined to accept the explanation given by the solicitor—yet to my mind it does not go far enough. These men were summoned two or three weeks ago, and had ample opportunity, and never communicated to the Chairman or Secretary, and never gave any reasons why they did not appear.

As to the construction Mr. Guthrie places on Mr. McDougall's coming here to satisfy the Committee and relieve all others from the necessity of coming here, I never understood it that way, and would not place any such construction on the action of the Committee.

The CHAIRMAN: Yesterday the Committee adopted a resolution to the effect that the witnesses connected with the Dominion Coal Company, and the Nova Scotia Steel Co. should be given an opportunity to explain their non-appearance before this Committee, in order that the Committee could properly report to the House. It seems to me that is definite enough to close that matter, unless the Committee desire to take some further action along that line.

Mr. MCKENZIE: As far as I am concerned, I always thought the best way of getting at the true inwardness of the operations of the Dominion Coal Company, and the Nova Scotia Steel and Coal Company, was to get their best officials, put them on the stand, and examine them, and get the facts as far as we could get them. I was overruled on that by the Committee, and they said, "We must have those sheets." Now the President was here, and gave a reason that was apparently satisfactory to the Committee, that he could not produce those sheets. Now the Committee appears to be back to the position that I always took. They want those officials. If it is the intention of the Committee to sit longer and get those men here and take that evidence, I am perfectly satisfied. I always took the position that those men should be examined—such men as the superintendents of the different mines. If it is the disposition of the Committee to examine those officials orally, if they will answer the questions put to them, I am perfectly satisfied.

[Mr. Norman Guthrie, K.C.]

If we are only going to bring them here to show our authority and then turn them out the moment they come here, I do not think we should do that, but we should accept the explanation of counsel. That is the attitude I take. Of course, if we are going to examine them, by all means bring them here; but if it is only to show our authority and turn them right out without asking them anything, I do not think that that would be a dignified position for us to take. Mr. Guthrie gave an explanation which I understood to be the case. If any gentleman here will look up the discussion which took place when Dr. Cowan moved his motion, he will see that he simply started with two men first, McColl and Gordon, and they were to produce the sheets. Neither of these men would know anything about the operation of the mines, because neither of them is a miner or has anything to do with the coal end of the business. They are mere bookkeepers. It was at my suggestion that men higher up were added to that list so that we would be sure to strike a man who had authority to bring the papers.

Mr. COWAN: Exactly.

Mr. McKENZIE: The idea was to get the papers; it was not then the idea to examine these men. If it is your intention to go into an examination, apart from the sheets, I am with you.

Mr. COWAN: I cannot agree with Mr. McKenzie. My idea was that we should call these witnesses until we got the cost sheets and that they should all be called upon to produce the cost sheets. Not one of them has done so. I am in this position. The evidence has not been satisfactory to me. We have called a lot of higher officials. We had a right to question them and we did question them, and yet we have not got the information which it is necessary for us to have on which to base our report. I cannot to-day recommend a policy to the Government in regard to the situation in Nova Scotia because I do not know what it costs to produce coal down there.

Mr. McKENZIE: I think this will be apparent to us as sensible men. Supposing you had Mr. Merrill, the general manager, in that chair now and you asked him for the sheets he would say, "My president was here and he did not produce them. Surely you do not expect me to produce them." That is what he would say at once.

Mr. COWAN: Precisely. They have shielded first one official and then another. Then they have used the American companies to shield themselves, and next they turn around and use the western companies as a further shield. That is the position, we might as well be frank about it.

The CHAIRMAN: There is nothing before the Committee. Let us have a motion, and then we shall have something to discuss. We cannot continue day after day this general discussion. It does not get us anywhere.

Mr. CHISHOLM: Did you hear anything from the western men who were summoned to be here?

The CLERK: No.

The CHAIRMAN: You remember that Mr. Mackie appeared on behalf of the Hillcrest Collieries, and other two companies have appeared by counsel.

Mr. CHISHOLM: There has been no official acknowledgement of the subpoena from them.

The CHAIRMAN: The Clerk says we have received nothing.

Mr. ROSS: I do not see that we are going to get very much ahead sitting here like a bunch of dummies. If we got these men here, I do not see that it would be of any use to the Committee before the end of the session anyway. I was not here on Wednesday night when the discussion took place about these men being summoned, but I think that Mr. Guthrie's explanation is perfectly satisfactory to me. They are not in contempt of this Committee any more than anybody else. It is a

[Mr. Norman Guthrie, K.C.]

question of taking what they are advised is a legal course as against their competitors in declining to produce their cost sheets before the session is over. For my own part, I think the only thing to do is for us to prepare our report and get to work on it, and set out the facts if we think it necessary. It is a question of time. We cannot prevent the session from ending, and we cannot ask the Government to prolong the session on account of this Committee. Other Parliaments will meet, and this Committee can be appointed again, and then we can meet all those fellows. I move that the Committee take up in executive meeting the preparation of its report, that we adjourn into executive meeting and take up the preparation of our report.

Mr. McKENZIE: There seems to be some objection to executive meetings.

Mr. Ross: I do not see why there should be.

Mr. McKENZIE: If you will leave that out of your motion I will second it.

The CHAIRMAN: I think I can say definitely to the Committee that you can only consider your report in executive session of the Committee.

Mr. Ross: I presume that is because we cannot divulge to the world our report before it is submitted to Parliament.

Mr. McKENZIE: If it is agreed that that is the only course then there is no necessity for a motion. If we all agree that we should proceed with the preparation of our report in executive meeting, it can so appear upon the minutes.

Mr. DOUGLAS: So far as the two auditors who were mentioned are concerned, I would like to examine them in regard to some matters arising out of Mr. McDougall's evidence, and I would like to see them here. I think it is safe to say that they were called over four weeks ago and later summoned. I think that perhaps their evidence is more material now than it would have been then inasmuch as the cost sheets were not handed to the Committee then. I believe their evidence would be more material now because the sheets would have spoken for themselves.

The CHAIRMAN: Mr. Ross has a motion before the Committee and I do not think it has been seconded yet. I did not understand Mr. McKenzie to say that he seconded it.

Mr. McKENZIE: Mr. Douglas told us yesterday that he was opposed to executive meetings, and I do not want to have any dissenting voice in the Committee, or to have it said that we are holding meetings that are to some objectionable. If Mr. Ross would make a motion that we proceed with the preparation of our report—

Mr. Ross: I move that we proceed with the preparation of our report.

Mr. DOUGLAS: My position yesterday was this: I made a motion to report to the House those witnesses for contempt for not appearing. I did not consider that that was in the nature of an executive act or that it should be considered at an executive meeting. I think that is in line with the ruling the Chairman has given this morning, that all that we should consider at an executive meeting is the making of our report. I think the same as Mr. Ross does that for the purpose of preparing a report it is not right that the report should be made public before Parliament gets it.

The CHAIRMAN: That is not a correct statement of my ruling. My ruling was that the report can be made only in executive session. I did not say that no other business should be done.

Mr. McKENZIE: If we decide by motion to proceed with the preparation of our report, it is a very simple matter to decide that we do so in executive meeting.

Mr. Ross: My motion would be that the Committee proceed to prepare its report for submission to the House.

Mr. McKENZIE: I am prepared to second that motion.

[Mr. Norman Guthrie, K.C.]

The CHAIRMAN: Could you preface that by a motion that the Committee adjourn open session and proceed to prepare its report?

Mr. ROSS: I move that the Committee adjourn from open session to executive session to proceed with the preparation of its report. Do it in any form you like, so long as we get something done.

Mr. MCKENZIE: I am not quite clear that we should mix anything else with motion to adjourn.

Mr. ROSS: I do not see that it is necessary to move adjournment. If I move that we proceed with the preparation of the report then as a matter of fact we must be in executive session. I think your ruling on that point is perfectly correct, I think that if I simply move that the Committee proceed with the preparation of its report for submission to the House, that is as far as I need go.

The CHAIRMAN: It is moved by Mr. Ross, seconded by Mr. McKenzie that the Committee proceed to prepare its report for submission to the House. Is it the pleasure of the Committee to adopt this motion? Any objection? The motion is carried unanimously.

Mr. DOUGLAS: It is not carried unanimously.

The CHAIRMAN: I find difficulty really in following these very close minute attempts—

Mr. MCKENZIE: My position is—

The CHAIRMAN: I will put the motion again, all in favour of the motion make it known.

A vote having been taken.

The CHAIRMAN: Do you wish the yeas and nays recorded? If not I declare the motion carried by four to two.

The Committee then went into executive session.

APPENDIX

Complete Statement including Illustrated Tables and Diagrams
submitted as Evidence given by Mr. H. M. E. Kensit, of the
Dominion Water Power Branch, Department of Interior.

(See Page 599 for Condensed Statement.)

THE COAL SITUATION IN CANADA IN RELATION TO WATER-POWER DEVELOPMENT

Canada imported in 1920 some 21,000,000 tons of coal; the cost delivered at Montreal would be about \$175,000,000.¹ The general causes leading up to this are well known and it is desired to consider here how far this situation is and will be affected by water-power development.

The total water-power developed in Canada and the United States to about the end of 1920 was approximately, as follows:—

WATER POWER DEVELOPED UP TO END OF 1920

	H.P.	Population	Per capita
Canada...	2,459,200	9,000,000	0.273 H.P.
U.S.A...	9,823,540	105,683,108	0.093 " "

from which it will be seen that Canada has developed 194 per cent more water-power per capita than the United States.

It will be endeavoured to show how greatly this has relieved the coal situation in the past and to give some indication of what may be expected in the future.

Various tables and diagrams have been prepared to illustrate this and are attached hereto.

The *general situation* regarding production and imports, and the "acute fuel area" into which coal has to be imported, are shown on plate 2, page 766, and from this it will be seen that for the year 1920 the total imports were 57 per cent of the total coal consumption of Canada.

The "*acute fuel area*" is defined as those portions of Canada producing little or no coal and more or less dependent on imported supplies.

The situation in the acute fuel area in 1920 may be summed up thus:—

	Consumption	Imports	Per cent imported
Quebec...	5,324,781	5,047,866	95.0 %
Central Ontario...	13,330,726	13,319,106	100.0 %
Manitoba and "Head of Lakes"	3,199,382	2,320,317	72.5 %
	<u>21,854,889</u>	<u>20,687,289</u>	<u>94.5 %</u>

The difference in the above table between consumption and imports is due to supplies from other provinces.

The term "Head of Lakes" is the division of territory made by the Bureau of Statistics for the purpose of coal trade returns and has to be adopted for that reason. It includes Port Arthur and the district of Ontario west of that point.

In the map of the acute fuel area on page 766, Saskatchewan is included because it does import a small quantity of United States coal, but it produces 22 per cent of its requirements and receives the balance from other provinces.

Water-power and coal equivalent.—Estimates of the amount of coal equivalent to a given amount of water-power vary very considerably, mainly due to the differences in the efficiency of operation and load factor assumed and to local conditions. From a study of the estimates made by a number of authorities it has been concluded that for the present purpose a conservative figure to take as representing average conditions in Canada now and in the near future is 10 tons of coal per horse-power year on

¹ Evidence of Mr. Caye, purchasing agent, G.T.Ry., before H. of C. Committee, April 19, 1921—cost of U.S. coal delivered at Montreal from various sources \$7.92 to \$8.80, average \$8.32.

THE COAL SITUATION IN CANADA, 1921

766

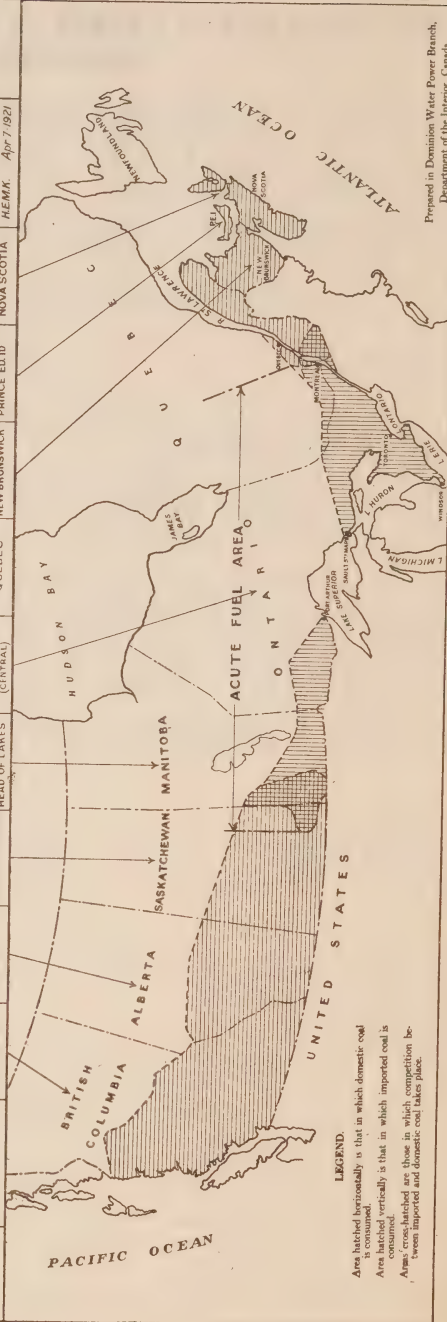
SPECIAL COMMITTEE

PLATE 2

Coal Consumption and Production in Canada, 1920

CONDENSED TABLE BASED ON RETURNS BY DOMINION BUREAU OF STATISTICS¹

I	2	3	4	5	6	7	8	9	10	11
	B.C. AND YUKON	ALBERTA	SASKATCHEWAN	MANITOBA AND HEAD OF LAKES	ONTARIO (UNITED)	QUEBEC	NEW BRUNSWICK	PRINCE ED. ID.	NOVA SCOTIA	GRAND TOTALS
O	1,895,071	4,926,219	1,501,852	3,199,382	13,330,726	5,324,781	18,063,302	123,606	3,838,902	35,226,841
P	3,095,011	6,954,856	335,389	—	—	—	170,930	—	6,412,382	16,968,568
	1,199,940	2,028,637	1,166,463	—	—	—	1,635,372	—	2,573,480	18,258,273
	61% —	71% —	22% +	100% +	100% +	100% +	95% +	100% +	60% —	48% + ²
N										
	Imports from U.S.A.	11,24	741	2,320,317	13,319,106	5,047,866	58,795	6,055	48,378	20,815,594
	Per cent of total consumption ³	0.7%	0.05%	72%	100%	95%	3.25%	5%	1.26%	57% ⁴
		ALBERTA	SASKATCHEWAN	MANITOBA AND HEAD OF LAKES	ONTARIO (UNITED)	QUEBEC	NEW BRUNSWICK	PRINCE ED. ID.	NOVA SCOTIA	HEW. Apr 7/1921



¹Preliminary Statement, February, 1921, Canadian Annual Coal Review, 1920.

²Saskatchewan obtains practically the whole of its additional coal from other provinces.

³These figures do not correspond on account of inter-provincial coal trade.

⁴Reference letters correspond with those on large detailed table.

Column 3 includes Fort William and Port Arthur and the Ontario district west thereof, termed "Head of Lake."

Prepared in Dominion Water Power Branch,
Department of the Interior, Canada.

a 33 per cent load factor for horse-power actually in use or to be developed, and 9 tons for "horse-power installed," which includes spare plant, and these figures have been used in this study. The United States Super Power Survey take this at about 11.5 tons.

The diagram illustrating the present coal consumption, the coal equivalent of developed water-power and the coal equivalent of the total available water-power, is given in plate 3, page 769, the blocks there shown being to scale, except those that are little more than a dot. A study of this diagram will show, speaking generally, how the bulk of the great water-power resources of Canada are situated in those districts where coal is almost or totally absent and where they are most needed. This may be summarized thus:—

	Water-power available	Annual coal ¹ equivalent
Quebec.	6,000,000 H.P.	90,000,000 tons
Ontario, Central.	5,620,000 "	84,300,000 "
Manitoba and "Head of Lakes" . . .	3,450,000 "	51,750,000 "
	<hr/> 15,070,000	<hr/> 226,050,000

It may assist full comprehension of this important point to sum up the situation in the acute fuel area as follows:—

ACUTE FUEL AREA

COAL IMPORTS AND WATER-POWER AVAILABLE IN ROUND FIGURES

	Coal imports	Annual Coal Equivalent	
		Of developed water-power	Of available water-power
Quebec.	5,100,000	8,381,000	90,000,000
Central Ontario.	13,300,000	8,760,000	84,300,000
Manitoba and "Head of Lakes" . .	2,300,000	1,331,000	51,750,000
	<hr/> 20,700,000 ²	<hr/> 18,472,000	<hr/> 226,050,000

Thus the "Acute Fuel Area" uses 59 per cent of the total Canadian coal consumption and imports 94.5 per cent of that amount.

These particulars are shown in greater detail and for the other provinces on plate 3, page 769, and the figures are tabulated on plate 4, page 778.

Uses of Coal.—The proportion of coal used for the principal purposes in Canada, the United States and the United Kingdom is shown below. The Canadian figures are deduced from a detailed list of uses given for 1917 in the Final Report of the Fuel Controller—no more recent table in a similar detailed form appears to be available. Those for the United States are as given by Dr. George Otis Smith, Director of the United States Geological Survey. Those for the United Kingdom are deduced from the Final Report of the Coal Conservation Committee of the Ministry of Reconstruction—while they are 1913 figures they represent normal conditions before the war.

¹ The "Water-Power Available" is given in terms of minimum continuous 24 hour power and on a 50 per cent load factor it would supply at least 50 per cent more power than the amounts indicate. The coal equivalent is therefore calculated on that basis at 10 tons per H.P. See also Plate IV, page 778.

² 59 per cent of the total coal consumption of Canada.

USES OF COAL*—EXCLUDING EXPORTS.

	Canada, 1920.	United States, 1920.	United Kingdom, 1913.
	Per cent.	Per cent.	Per cent.
1. Railways.....	42.6	27.0	8.0
Bunker coal.....	1.6	2.1	1.3
2. Industries and coke making.....	44.2	29.1	9.3
3. Electric power plants.....	28.5	49.4	53.0
4. Domestic use and gas works.....	1.5	2.6	9.7
	25.8	18.9	28.0
	100.0	100.0	100.0

*For the details on which this Table is based see pages 779 and 780.

(1) The most striking figure in the above table is that showing the burden of the railways, due no doubt to the great length in proportion to the population.

The proportion of coal used for railway purposes as shown is 50 per cent greater in Canada than in the United States and 430 per cent greater than in the United Kingdom.

The coal used per annum by railways in Canada is about 15,000,000 short tons, and in the United Kingdom 15,000,000 long tons, a difference of 12 per cent, but the respective populations served are 9,000,000 and 45,000,000.

This may well be described as the burden of the railways in Canada and leads on to the question of railroad electrification by means of the abundant water-power available; this is further referred to below.

The bunker coal shown is that used for coasting and lake steamers.

(2) The majority of this coke is believed to be used for manufacturing purposes but an unknown proportion is probably used for domestic purposes.

(3) Electric power plants in Canada are mainly operated by water-power; in the United States largely by coal; in the United Kingdom almost entirely by coal. In consequence, the percentage of coal so used is 73 per cent higher in the United States and 545 per cent higher in the United Kingdom than in Canada.

(4) The lower figure for the United States is probably due to the milder average climate, becoming semi-tropical in the south. The higher figure for Great Britain is due to the universal use of open fireplaces and the extensive use of gas lighting.

Uses of coal per capita.—This is shown in a similar manner to the foregoing in the table on page 770. From the latter it will be seen that the use of coal per capita is 159 per cent greater in industries and 150 per cent greater in electric power plants in the United States than in Canada and that the general average of coal used per capita is 50 per cent higher in the United States than in Canada.

PLATE 3

WATER POWER AND COAL EQUIVALENTS

COAL IN MILLIONS OF TONS PER ANNUM IN 1920.

WATER POWER IN USE—ACTUAL, JAN. 1, 1920.

WATER POWER AVAILABLE—MINIMUM CONTINUOUS 24-HOUR POWER.

FOR DETAILS AND NOTES SEE PLATE 4.

	COAL EQUIVALENT OF WATER POWER AVAILABLE	WATER POWER AVAILABLE IN HORSE POWER	COAL EQUIVALENT TO WATER POWER IN USE	WATER POWER IN USE IN HORSE POWER	COAL CONSUMPTION	COAL PRODUCTION IN TONS PER ANNUM
B.C. AND YUKON	45,000,000	3,000,000	2,800,440	2,804,444	1,092,077	3,092,601
ALBERTA	7,500,000	475,000	577,260	51,756	497,6218	692,4858
SASK.	27,000,000	510,000	133,000	133,100	150,652	335,509
MANITOBA & HEAD OF LAKES	51,000,000	3,450,000	133,000	133,100	3,790,882	
ONTARIO (CENTRAL)	84,500,000	5,620,000	670,000	674,005	14,842,728	
QUEBEC	90,000,000	6,000,000	6,300,000	6,306,071	5,300,701	
P.E.I.	45,000	1,000	162,10	162,1	123,006	
NEW BRUNSWICK	150,000	100,000	164,870	16,857	2,604,502	700,000
NOVA SCOTIA	150,000	100,000	23,570	23,559	3,623,902	6,422,332

Prepared by Dominion Water Power Branch, Department of the Interior, Ottawa.

N.C. 1921, July 3, 1921.

USE OF COAL IN TONS PER CAPITA¹—EXCLUDING EXPORTS.

	Canada, 1920.	United States, 1920.		United Kingdom, 1913.	
		—	Per cent greater or less than Canada.	—	Per cent greater or less than Canada.
1. Railways.....	1.67	1.58		0.3	
Bunker coal.....	0.06	0.13		0.06	— 77.5
	1.73	1.71	— 1.2	0.39	
2. Industries and coke making.....	1.12	2.90	+159	2.22	+ 98
3. Electric power plants.....	0.06	0.15	+150	0.40	+566
4. Domestic use and gas works.....	1.01	1.12	+ 10.9	1.17	+ 15.8
Tons per capita.....	3.92	5.88	+ 50	4.18	+ 6.64

¹For the details on which this Table is based see pages 779 and 780.

It appears obvious that there is a direct relation between this fact and the fact that the water-power developed per capita in Canada is 194 per cent greater than in the United States. Furthermore it appears reasonable to assume that, especially in view of our colder climate, *if this water-power development had not been made, the total consumption of coal in Canada would be 50 per cent or more greater than it now is.*

Fifty per cent on the present total coal consumption is 17,613,000 tons, which, at an average price of \$8.32 per ton¹ amounts to \$146,500,000 per annum, and this represents the nature of the additional annual sum that would have had to be spent on foreign coal and freight if this water-power development had not been made.

This applies to the present time. It would not have been as large in the past but it will be greater in the future, both from the increase in consumption and from the probable increase in the average cost of coal, as shown in the following paragraph.

Future price of coal.—The Progress Report of the United States Super Power Survey, dated February 24, 1921, and addressed by the Secretary of the Interior to the President of the United States as follows:—

“A conference with the coal authorities indicates that a fair figure for the average price of coal during 1919 was \$2.90 at the mine and that during the period from that date to 1930, \$3.50 per ton.”

This appears to indicate that the average price for the next ten years will be over 20 per cent higher than in 1919.

Capital invested in water-power.—The approximate total of water-power now developed in Canada is 2,459,200 horse-power and “the average investment per installed water horse-power is \$217” (Dominion Bureau of Statistics), so that the total capital expended on water-power development is approximately \$534,000,000.

This represents money invested in a home industry and of that investment over 83 per cent or \$445,000,000 is within the acute fuel area.

But for this investment for this particular purpose, it appears, as shown above, that Canada would now be expending some \$146,500,000 per annum for additional imported coal.

It therefore appears that, owing to the new high level in the cost of coal and its probable continuance, the saving in imported coal due to water-power developed is, from the national point of view, now equivalent to 27.5 per cent per annum on the capital that has been invested and that has rendered that result possible.

¹ See page 765.

Electric energy exported and coal equivalent.—The report of the Electricity Inspection Service, Department of Trade and Commerce, 1920, shows that the total energy exported in the year ending March 31, 1920, was 950,000,000 K.W.H.

This is central station energy and to be conservative the coal equivalent should be taken at the average figure for that class of service rather than the higher figure for all purposes.

The most recent investigation on coal consumption and probably the most thorough ever made is that of the United States Super Power Survey, and Mr. W. S. Murray, the chairman, states that the average coal consumption in central stations in that area is 4.7 pounds per K.W.H.

On this basis the coal equivalent of Canadian electrical energy exported is 2,232,200 tons per annum.

This export may be looked upon as a return to the United States for an allied product that we are not able to produce ourselves within the acute fuel area, i.e., anthracite coal for house heating.

The total anthracite coal imported in 1920 was 4,912,964 tons and, as above, the coal equivalent of the exported electric energy was 2,232,500 tons, or over 45 per cent of the anthracite coal imports.

Railroad electrification.—The United States Super Power Survey is understood to have made a thorough study of this question within the proposed area and gives its conclusions in its Progress Report referred to on page 770.

The area dealt with is that between Boston and Washington, approximately 450 miles long by 100 to 150 miles wide, with a population of about 20,000,000. It is less than 5 per cent of the total area of the United States, but contains 70 per cent of the total industrial development and uses 40 per cent of the total coal consumed in the United States.

The area contains a total (including yards and sidings) of 36,000 miles of track and although it is the most densely populated area in the United States it is concluded that the traffic density will only permit of electrifying 12,500 miles or about one-third of the total. It is estimated however that the electrification of that portion would save 6,000,000 tons of coal or \$40,000,000 per annum and a further \$50,000,000 in repairs and maintenance, a total of \$90,000,000 per annum, and that the electrification would pay 14 per cent on the investment.

In considering these figures in relation to Canada it has to be borne in mind that they apply to an area supplied with abundant and comparatively cheap coal and that the limiting conditions as to traffic density would be less close within the acute fuel area of Canada.

The present and future situation.—Two diagrams have been prepared to show the relationship between coal consumption and water-power development from 1907 to 1920 and the estimated relationship up to 1930.

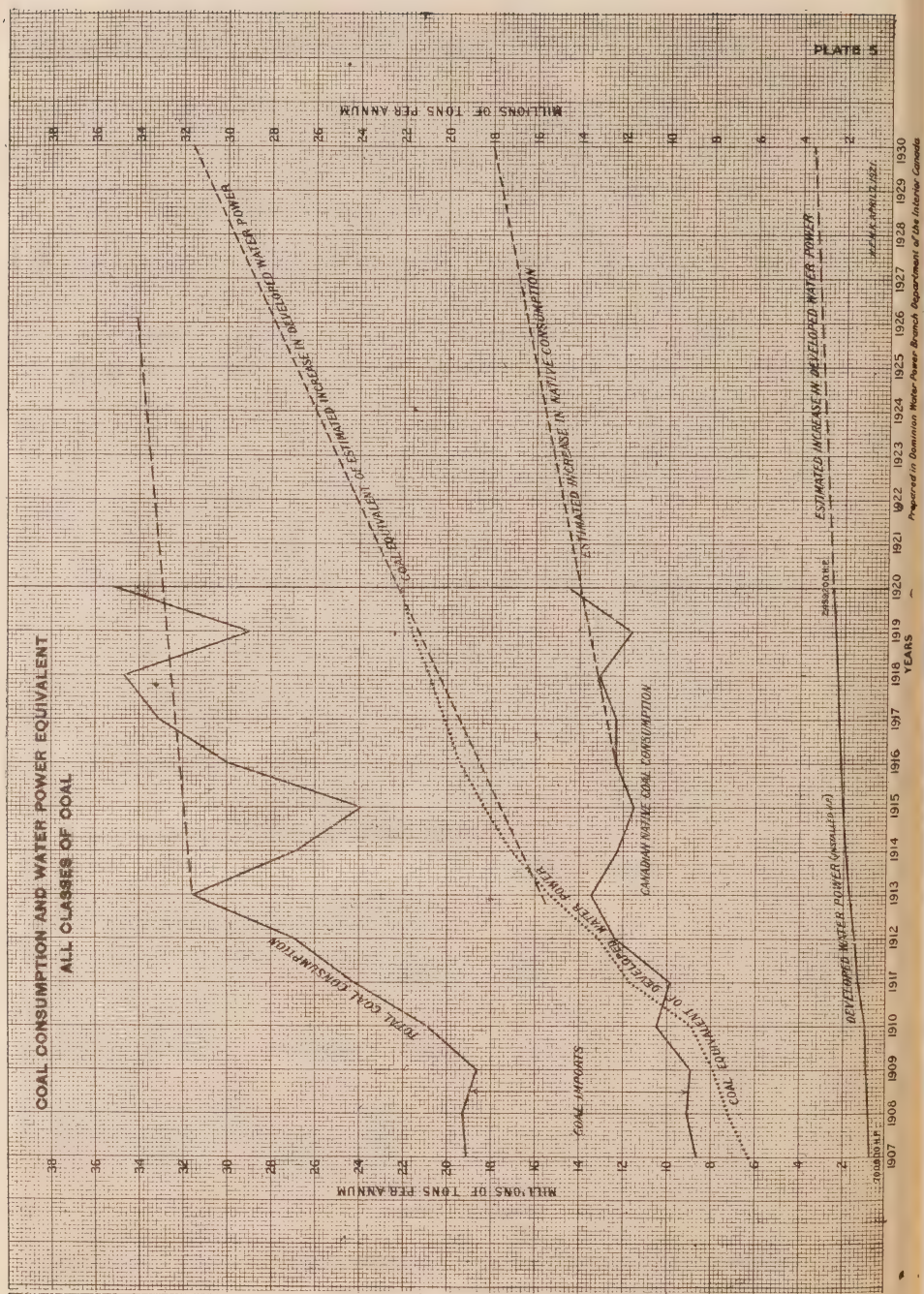
These are plates V and VI, the actual figures and notes being on the following page in each case.

Before commenting on these diagrams the two following points should first be made clear.

The apparent great variation in annual imports of coal is understood to be largely due to the statistics being based on Customs Department data. The Canadian record represents coal "entered for home consumption" and "this entry may be deferred several months from the actual time of import."

The apparently more rapid increase shown on the diagrams in the "Coal Equivalent of Developed Water-power" itself, is due to the equivalent coal being taken at 9 tons per H.P. year, so that each annual increase in water-power developed is multiplied by 9 to get the coal equivalent.

See "Railway Electrification," John Murphy, before E.I.C. Mar. 28, 1918; "Canada's Railway Problem and Its Solution" before E.I.C., Jan. 18, 1917; "Electrification and Power Developments for Steam Trunk Lines in Canada," Walter P. Chapman, *Electrical News*, Mar. 15, 1921; "The Problem of the Electric Railways," L. A. Herdt, D.Sc., *Electrical News*, June 1, 1919.



Referring now to Plate V page 772, it will be seen from this diagram that the "Coal Equivalent of Developed Water-power" crossed the line of "Canadian Native Coal Consumption" in 1910 and is tending to increase its lead.

The "Total Coal Consumption" is so variable due to the variation in imports (see above explanation) that the "curve" cannot be satisfactorily projected, but the "Coal Equivalent of Developed Water-power" appears to be certainly gaining rapidly on this also.

USE OF COAL AND WATER-POWER DEVELOPMENT—ALL CLASSES OF COAL, 1920.

Year.	Canadian coal consumption ¹ .	Imports from United States "Entered for consumption." ¹	Total.	Developed water-power. Horse-power installed. ²	Coal equivalent. ²
1907.....	8,617,352	10,549,503	19,166,855	700,000	6,300,000
1908.....	9,156,478	10,195,424	19,351,902	800,000	7,200,000
1909.....	8,913,376	9,711,826	18,625,202	880,000	7,920,000
1910.....	10,532,103	10,438,123	20,970,226	980,000	8,820,000
1911.....	9,822,749	14,424,949	24,247,698	1,320,000	11,700,000
1912.....	12,385,696	14,549,104	26,934,800	1,460,000	13,140,000
1913.....	13,450,158	18,132,387	31,582,545	1,700,000	15,300,000
1914.....	12,214,403	14,637,920	26,852,323	1,900,000	17,100,000
1915.....	11,500,480	12,406,212	23,906,692	2,040,000	18,360,000
1916.....	12,348,036	17,517,820	29,865,856	2,160,000	19,440,000
1917.....	12,313,603	20,810,132	33,123,735	2,240,000	20,160,000
1918.....	13,160,731	21,611,101	34,771,832	2,320,000	20,880,000
1919.....	11,611,168	17,251,849	28,863,017	2,400,000	21,600,000
1920.....	14,410,345	20,815,596	35,225,941	2,459,200	22,133,000

¹"The Production of Coal and Coke in Canada, 1919," Mines Branch, except 1920, which is from the "Preliminary Statement" for 1920 by the Dominion Bureau of Statistics.

²Taken at 9 tons per horse-power year, as this is horse-power installed and exceeds that actually "in use."

³Approximate figures, including only those wheels now in operation.

In considering the effect of water-power development on coal consumption, however, it must be remembered that the use of anthracite coal for house heating is not affected thereby and that the use of coal for locomotives is not and will not be affected unless electrification takes place.

To properly exhibit the effect therefore, it is necessary to prepare a similar diagram which excludes the above uses of coal. This has been done and is shown as plate VI.

Plate VI, page 774. This shows the coal equivalent of developed water power in the same manner as on plate V, but the consumption of coal is that of soft coal only (bituminous and lignite) and excludes that used for locomotives—as the locomotives used approximately 10,500,000 tons in 1920, this is a big item.

It will be observed that the line of "Coal Equivalent of Developed Water-power" caught up and passed the line of native safe coal consumption in 1908 and passed the line of total soft coal consumption in 1913 and is still well ahead of both in spite of the hindrance to the financing of water-power projects due to war and post-war conditions.

In estimating increases up to the year 1930 it will be observed that the increase in water power development is assumed not to be greater than that during the war and post-war period and that increases in coal consumption are shown as the projection of the line joining the consumptions of the previous eight years.

USE OF COAL AND WATER-POWER EQUIVALENT—SOFT COAL ONLY AND EXCLUDING THAT FOR LOCOMOTIVES, 1920.

Year.	Consumption of Soft Coal. ¹			Developed water-power.	
	Canadian.	Imported "Entered for Consumption."	Total Soft, excluding locomotives.	Horse-power installed. ²	Coal equivalent. ³
1907.....	7,312,237	4,754,408	12,066,645	700,000	6,300,000
1908.....	7,693,383	3,957,385	11,650,768	800,000	7,200,000
1909.....	7,299,119	3,180,080	10,479,199	880,000	7,920,000
1910.....	8,634,318	2,695,747	11,330,065	980,000	8,820,000
1911.....	7,876,283	5,628,315	13,504,598	1,320,000	11,700,000
1912.....	10,058,795	4,821,793	14,880,588	1,460,000	13,140,000
1913.....	10,775,813	7,019,896	17,795,709	1,700,000	15,300,000
1914.....	9,769,975	4,286,047	14,056,022	1,900,000	17,100,000
1915.....	9,527,211	3,563,710	13,091,921	2,040,000	18,360,000
1916.....	9,805,138	6,734,788	16,539,926	2,160,000	19,440,000
1917.....	9,496,462	8,447,262	17,943,724	2,240,000	20,160,000
1918.....	10,330,420	9,768,427	20,098,847	2,320,000	20,880,000
1919.....	8,966,054	5,748,929	14,714,983	2,400,000	21,600,000
1920.....	11,382,576	8,287,632	19,670,208	2,459,200	22,133,000

¹From the "Production of Coal and Coke in Canada, 1919," Mines Branch, except 1920, which is from the Preliminary Statement for 1920 by the Dominion Bureau of Statistics. Anthracite coal for house heating and coal for locomotives are excluded as they are not so far appreciably affected by water-power development. Coal for locomotives is distributed in the proportion of 72.4 per cent American coal (in 1919) as per Bureau of Statistics.

²Taken at 9 tons per horse-power year, as this is "horse-power installed" and exceeds that actually "in use."

³Approximate figures, including only those wheels now in operation.

It will be seen from this diagram (plate VI, page 774) that, in spite of the financial conditions that have hindered development since 1914, the "Coal Equivalent of Developed Water-power" was greater than the total soft coal consumption (less that for locos) in 1920 by 12½ per cent and by 1930 it should be 40 per cent greater.

It may be well to repeat here some of the points previously brought out in order that they may be considered together with the foregoing:—

The consumption of coal per capita is 50 per cent less in Canada than in the United States due mainly to the water-power development per capita being 194 per cent greater in Canada than in the United States. Otherwise the colder climate might be expected to lead to an opposite result (page 770).

The resultant saving in coal is now equivalent to \$146,500,000 per annum (page 770) and, due to the new high level in the price of coal, this sum is, from the national point of view, now equivalent to a return of 27.5 per cent per annum on the capital invested in water power developments (page 770).

The total water-power now developed in Canada is 2,459,200 horse-power and the capital so invested is about \$534,000,000, of which over 83 per cent is within the acute fuel area.

The foregoing particulars have been prepared to show the influence of water-power development in economizing the consumption of fuel, both in past results and as regards the future. It is submitted that the actual results so far secured amply demonstrate the value and importance of this source of power and fuel economy, and the necessity of further promoting such development by all possible means.

H. M. E. KENSIT.

MAY, 1921.

COAL CONSUMPTION AND PRODUCTION IN CANADA, 1920

BASED ON RETURNS BY DOMINION BUREAU OF STATISTICS.

PLATE I.

	1	2	3	4	5	6	7	8	9	10	11	
		B. C. and Yukon.	Alberta.	Saskatch- ewan.	Manitoba and Head of Lakes.	Ontario (Central).	Quebec.	New Brun- swick.	Prince Edward Island.	Nova Scotia.	Grand Totals.	
					CONSUMPTION.							
A Domestic ²												A
B Anthracite		119,522	119,522									B
C Bituminous		1,755,596	3,075,676									C
D Lignites			1,720,020	181,238				19,486		3,788,960		D
E Totals		1,755,596	4,915,218	181,238				19,486		3,788,960	10,660,498	E
F Received from other Provinces												F
G Anthracite		5,059		4,657	1,356						11,072	G
H Bituminous		69,225	9,278	176,616	259,694	11,620	278,287	1,008,021	117,551	664	1,930,956	H
I Lignites		51,979	599	1,138,600	618,736						1,809,914	I
J Totals		126,263	9,877	1,319,873	879,786	11,620	278,287	1,008,021	117,551	664	3,751,942	J
K Imported												K
L Anthracite		75	517	206	313,191	2,945,782	1,544,456	57,859	5,544	45,334	4,912,964	L
M Bituminous		13,137	607	535	2,007,126	10,373,324	3,503,410	836	511	3,044	15,902,630	M
N Totals		13,212	1,124	741	2,320,317	13,319,106	5,047,866	58,795	6,055	48,378	20,815,594	N
O Grand Totals		1,895,071	4,926,219	1,501,852	3,199,382	13,330,726	5,324,781	1,086,302	123,606	3,838,902	35,226,841	O

PRODUCTION.

P Anthracite												P
Q Bituminous		3,095,011	3,445,347					170,930		6,412,382	13,123,670	Q
R Lignites			3,378,915	335,389							3,714,304	R
S Totals		3,095,011	6,954,856	335,389				170,930		6,412,382	16,968,568	S

EXPORTS.

T	Abroad.....	1,191,167	3,106	3,132	721	1,372	113,050	1,245,673	2,558,221	T
U	To other Provinces.....	148,248	2,036,532	151,019			38,394	1,377,749	3,751,942	U
V	Totals.....	1,339,415	2,039,638	154,151	721	1,372	151,444	2,623,422	6,310,163	V

PRODUCTION VS. CONSUMPTION.

W	Production over Consumption.....	1,199,940	2,028,637					2,573,480	5,802,057	W
X	Consumption over Production.....		1,166,463				915,372		2,581,835	X
Y	Consumption—no Production.....			3,199,382	13,330,726	5,324,781		123,606	21,978,495	Y

¹Preliminary Statement, February, 1921, Canadian Annual Coal Review, 1920.

²Consumption of domestic coal—not production. For production see line P.

Column 5 includes Fort William and Port Arthur and the Ontario district west thereof, termed "Head of Lakes."
Line O. Total consumption equals production plus all imports and minus all exports.

Prepared in Dominion Water-Power Branch, Department of the Interior, Canada.
H.E.M.K. April 7, 1921.

THE COAL SITUATION IN CANADA, 1921.

SEE DIAGRAMMATIC REPRESENTATION ON PLATE III.

—	British Columbia and Yukon.	Alberta	Saskatchewan.	Manitoba and Head of Lakes. ²	Ontario (Central).	Quebec.	Prince Edward Island.	New Brunswick.	Nova Scotia.	Grand Totals.
POPULATION ¹	727,000	588,000	754,000	766,000	2,674,000	2,326,000	94,000	369,000	519,000	8,817,000
COAL:										
Annual production in tons.....	3,095,011	6,954,856	335,389	.....	.....	.....	.....	170,930	6,412,382	16,968,568
Annual consumption in tons.....	1,895,071	4,926,219	1,501,852	3,199,382	13,330,726	5,324,781	123,606	1,806,302	3,838,902	35,226,841
Annual consumption per capita.....	2.6	8.4	2.0	4.2	5.0	2.3	1.3	4.9	7.4	.....
WATER-POWER:										
Total available horse-power.....	3,000,000	475,000	513,000	3,450,000	5,920,000	6,000,000	3,000	100,000	100,000	19,261,000
Coal equivalent ⁵	45,000,000	7,130,000	7,700,000	51,800,000	84,500,000	90,000,000	45,000	1,500,000	1,500,000	289,000,000
Actually in use, horse-power ³	288,144	31,754	.....	133,100	876,015	838,071	1,621	16,657	29,359	2,214,721
Coal equivalent ⁴	2,881,440	317,540	.....	1,331,000	8,760,000	8,381,000	16,210	166,570	293,550	22,147,000

¹Estimates of the Dominion Bureau of Statistics on March 31, 1919. Not including Northwest Territories.²"Head of Lakes" includes Port Arthur, Fort William, Kenora, Keewatin, Rainy River, Fort Frances, etc. by the Bureau of Statistics for the purpose of coal trade returns.³As at January 1, 1920.⁴One horse-power year equals 10 tons on a 33 per cent load factor.⁵The "Total available horse-power" given is the minimum 24-hour continuous power. The installed capacity and peak load capacity would usually be at least 50 per cent greater. For instance in first column 3,000,000 horse-power would be equivalent to approximately 4,500,000 horse-power installed, which on the basis of H.E.M.K. April 7, 1921.

PLATE IV.

Estimated at 147,000. This division is that made

USE OF COAL IN CANADA, 1917¹—TONS PER ANNUM EXCLUDING EXPORTS.

	Original Table.	Rearrangement.	Per cent of use.
Railways.....	11,792,550	12,685,550	42.6
Bunker coal.....	428,929	464,091	1.6
	12,221,479	13,149,641	
Industries—			44.2
United States coal.....	4,556,704		
Canada coal.....	2,036,741		
Producing coke.....	1,240,558		
	7,834,003	8,481,303	28.5
Electric power plants—			
United States coal.....	103,377		
Canada coal.....	315,626		
	419,003	452,503	1.5
Domestic use.....	6,819,058		
Gas works.....	290,228		
	7,109,286	7,646,286	25.8
	27,633,771	29,729,733	100.0
² Colliery consumption.....	1,083,772		
² Known losses in mining.....	392,362		
² Gain on tonnage in stock.....	615,828		
	2,095,962		
	29,729,733		

¹Deducted from Table on page 24 of "Final Report of the Fuel Controller," March, 1919.

²These items, distributed pro rata amongst the preceding items, gives the second column or "Rearrangement."

USE OF COAL IN CANADA, 1920.

1920 CONSUMPTION DIVIDED IN THE RATIO SHOWN BY THE FUEL CONTROLLER FOR 1917—INCLUDING DOMESTIC AND IMPORTED COAL, EXCLUDING EXPORTS.

		Tons.	Ratio.	Per capita. ¹
			Per cent.	
Railways.....	15,000,000			
Bunker coal.....	565,000			
		15,565,000	44.2	1.73
Industries.....		10,040,000	28.5	1.12
Electric light and power plants.....		530,000	1.5	0.06
Domestic use, including gas making.....		9,091,000	25.8	1.01
		35,226,000	100.0	3.92

¹Population in 1920, 9,000,000, per estimate tabled in the House of Commons, April 6, 1920.

USE OF COAL IN THE UNITED KINGDOM, 1913—EXCLUDING EXPORTS.

	—	Long tons.	Ratio.	Short tons. Per capita.
			Per cent.	
Railways.....	15,000,000			
Bunker coal for coasting steamers.....	2,500,000			
		17,500,000	9.3	0.39
Industries.....		100,210,000	53.0	2.22
Electric light and power plants.....		18,290,000	9.7	0.40
Domestic use.....	35,000,000			
Gas works.....	18,000,000			
		53,000,000	28.0	1.17
		189,000,000	100.0	4.18

Long tons=2,240 lbs. In terms of short tons the consumption is therefore

$$189,000,000 \times 2,240 = 212,000,000.$$

2,000

Population of United Kingdom in 1911, 45,222,000.

¹Deduced from Final Report of the Coal Conservation Committee, Ministry of Reconstruction, 1918., Cd. 9084, page 10.

USE OF COAL IN THE UNITED STATES, 1919—PER 1,000 TONS MARKETING,
EXCLUDING EXPORTS.

Original Table by Dr. George Otis Smith. ¹		Rearrangement.	Per cent of use.
Railways.....	250	Railways..... 259 10	27.0
Industries.....	350	Bunker coal..... 20 70	2.1
Coke manufacture.....	130		
Domestic heating and cooking.....	165		
Export and bunkers.....	60		
Mining in the coal field.....	35	Industries and coke manufacture 472 60	29.1
Gas works.....	10	Electric power plants..... 24 86	49.4
		Domestic use and gas works.. 181 34	2.6
			18.9
	1,000		
			958 60
			100.0

Exports in 1918 were 4 per cent, say 40 tons per 1,000, which should be excluded, and this leaves 20 tons for "bunkers," which is specified to be for coasting vessels.

Mining in coal field=35. Distribute this less the 4 per cent share against exports, pro rata amongst the other items. These changes give the second column.

¹United States Press Digest. November 17, 1920.

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